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MANAGEMENT IN THEORY AND PRACTICE

21st – 22nd April 2016

Faculty of Management at Comenius University,
Bratislava, Slovak Republic

Daniela Majerčáková (eds.)
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Preface

The main conference organizer is the Faculty of Management at Comenius University in Bratislava.

The conference focuses on the theoretical background and his practical application in all areas of business and management environment as well as for academic purposes such as innovation and building awareness of PhD. students about the utilization of individual courses of doctoral studies and of course their own research work on topic of dissertation thesis.

The conference is also open to young scientists who are developing their research objectives and goals, whether in the form of improving teaching and its connection with practice or working on research projects and grants with different target entities related to the specific field of management.
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Analysis of start-up investment opportunities in European region

Monika Roštárová
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Abstract
The article deals with the financing start-ups as a new form of establishing a business. The paper creates a list of possibilities for obtaining investment for start-ups in Europe. The publication is mainly focused on investment funds, business angels and venture capitalists. We will analyse a chosen start-up from European region. The main benefit of article is a comparison of the various sources of funding start-ups and a list of recommendations for a specific start-up company.

Key words: start-up, investor, business angel, fund, venture capital, early stage

JEL Classification: G24

Introduction
European business environment has been changing in recent decade of years. Start-ups are a new phenomenon, which was firstly established in US. An article is focused on the financial forms of support, which are known and typically used in European region. Venture capital is the influential factor in European economy and we can recognise the contribution of start-up investments in GDP in particular European countries in the last decade of years. The research is based on a real case study of start-up key.vi and statistics collected by several associations of investors formed in European region. The article compares venture capital investments according to the source of investments, industry of investee and the form of venture capital and forms recommendations for start-up and its owners who are looking for a funding.

The research objective
The main issue of the article is the start-up financing, especially the analysis of different sources of start-up funding. The general subject is start-up; the problem is its funding from various sources. Innovation, new ideas, technology development represent major challenges of contemporary society. The article deals about criteria of choosing the correct form of funding for Slovak start-ups. The research is based on the real case study of Slovak start-up key.vi and its financial situation. The author of article works on her research in accelerator Flemio, where she is in charge of the company. Key.vi start-up is one of Flemio projects and author prepared a part of start-up business plan, financial plan and documents used for research purposes.

Methods and methodology
The research is processed by using a wide scale of the scientific methods and procedures. The specific range of methods was based on the research needs of the individual parts. The intention is to follow the logical continuity of the articles ‘parts, the correctness and the adequacy of information and data. First part is focused on the definition of start-up and on the determination of the cycle of start-up financing. This section is prepared by using the analytical methods – the
analysis, the casual analysis, the synthesis, the induction and the deduction. The first part is based on literature review, it is based on available literature and studies.

Empirical research was carried out and is based on a case study which deals with investment in start-ups in the European region. This case study is based on real situation of start-up key.vi and surveys which were aimed at business angels and venture capital or other funds set aside for start-up. The second part is prepared by using scientific methods – the analysis (the secondary analysis, the causal analysis), the comparison.

**Literature review**

*Start-up is an innovative organization formed to search for a repeatable and scalable business model.* The business model is the main factor of difference between the start-up and other new enterprises. (Blank)

Professor Steve Blank briefly describes features of start-up business model. *A company with a scalable business model is able to rapidly increase its sales and number of customers* (Blank). Scalability is a condition that the volume of sales did not increase in proportion to the cost of the project. Otherwise, the company would not be interesting for investors. A repeatable business model is related to an income generated by the company. The business model is repeatable when the company is able to achieve revenue through its activities more than once.

From the point of accounting *start-up firms have usually a low total assets turnover till their incomes increase to the covering assets level from first round of investments* (Komorník). Turnover is directly proportional sales and start-up in first stages of their lifecycles don’t have any sales or incomes. Assets are restricted, but the first amount of assets is a key source.

The difference between a start-up and a small company is visible in the character of companies ‘goals. Small companies focus on a profitability and a stable long-term value (Majercakova). Start-ups are based on a growth potential and incomes. Both of them wants to be profitable in the end, but start-ups need to attract investors. The profitable company doesn’t need any investor when we don’t think about the stage of expansion.

Venture capital is defined as a source of financing for new businesses. Venture capital funds pool investors’ cash and loan it to start-up firms and small businesses with perceived, long-term growth potential. *Venture capital is the most important way of funding start-ups that do not have access to their own capital. Described capital entails high risk and potentially high returns for the investor. There are several types of venture capital and they differ in start-up’s stage and amount of investment. Individual investors usually invest mainly one type of capital.* (Slovak business Agency)

*Pre-seed capital* is used for financing of ideas and research project with the goal of building a successful company around it in later stages. Pre-seed start-up are working on the business model and description of value creation for future customers.

*Seed capital* represents sources used for a market research and all activities before company’s establishment. *Investor finances the testing of investee’s entrepreneurship with seed capital. Seed financings may be directed toward product development, market research, building a management team and developing a business plan* (Investopedia). A genuine seed-stage company has usually not yet established commercial operations - a cash infusion to fund continued research and product development is essential. These early companies are typically quite difficult business opportunities to finance.
Start-up capital is applied to overlap initial costs including purchase of new machinery and equipment, purchasing of technologies, development of technologies, initial costs for marketing etc. Start-up capital is used for financing of start-up for first two years of operation.

Growth capital represents a funding to the initial growth of company. The phase of financing starts when the final product is created and a testing stage is finished and validated by customers in comparison to start-up capital. Money from growth capital cover marketing costs and expansion.

There are manifold classifications of venture capital, which vary by author. Some US authors and researchers in start-up field use the term early stage capital. Mentioned term is connected with the capital which has been used for first three years of company’s operation. Early stage capital divides into start-up capital and growth capital. We consider start-up capital and growth capital as two separated form of capital in this article.

Expansion capital represents the amount of money intended for expansion. It is difficult to support expansion just by using own resources. The term expansion is linked to opening new foreign markets with selling the same product or a new product development. Expansion capital is used for mentioned purposes.

Mezzanine (bridge) capital is a special form of capital. Bridge capital finances the step of going public and represents the bridge between expanding the company and the Initial Public Offering (IPO). IPO is the first sale of stocks by a private company to the public. Mezzanine capital does not strictly belong to venture capital.

Three F: Family, Friends and Fools are important people who support the biggest risk, because they invest to a new business concept. They do not belong to typical investors because they offer a financial support for the realisation of start-up concept and start-upper’s life being without expecting any return of their investment. The start-upper uses his own savings and 3F donations to create a minimum viable product in pre-seed (idea stage).

The European Trade Association of Business Angels, Seed funds and other Early Stage Market Players (EBAN) describe the business angel investor as a high net worth individual who provide smaller amounts of finance from £25 000 to £250 000 at an earlier stage in comparison to venture capital funds, accelerators etc. Angel investors usually put their resources into the innovative, scalable and repeatable business model to first versions of product, which are suitable for betatesting and market validation.

The total European early stage investment market is estimated to be worth 7, 5 billion Euros. Business angels represent the biggest share of the investment market with 5, 5 billion Euros of investment, followed by the venture capital industry investing 2 billion Euros in early stages (pre-seed, seed, start-up capital and growth capital).

The importance of business angels to the equity capital industry has grown significantly in recent years. Equity from business angels and their associations is increasing and becoming more important than venture funds’equity in Europe. Raising money via crowdfunding platforms is popular with the public, but a crowdfunding investments ‘rate is still very low. Experts in start-up field expect a significant growth in the next decade of years. Crowdfunding represented just 1% of early stage investment in European region in 2013.

Business angels are mostly successful entrepreneurs and managers. Some of them do their own PR activities and personally looking for start-ups. Others cooperate with investment clubs and networks. Business angels ‘networks are often multinational. On the other hand according to
European statistics angel investors belong to global associations and networks, but they invest to companies in their home countries. Start-ups have a big chance to find investor in their home country. Cross-border investment remains marginal as investments in the same country of the investor accounted for 96% of the deals made in 2013. Deals inside and outside the investors’ region are 52% and 44% respectively. Investment in other European countries accounted for 4% of the deals while investment outside Europe represented only 1% of investments. (EBAN)

A venture capital fund is a pooled investment that uses the money from third-party investors, such as investment banks or wealthy investors, to invest in business projects. (Papik) Businesses that seek venture capital often carry more risk. They are either unwilling to pay the interest on bank or market loans or are unable to obtain them. Venture capital can be provided in two basic forms. First of all, it's called seed capital funds that provide young promising projects without sufficient funds. The second option is itself risky investments. Search for businesses around that with the realization of his own project already started but need additional capital for expansion. Venture capital funds are not the only providers of funds. Most of them have their own experts who advise prospective firms. An initial seed investment round made by a professional VC firm typically ranges from $250,000 to $1 million. (Blank)

The European Research and Development fund supports innovations and start-ups in European region. Small Start-up Grant Scheme supports the growth of new enterprises having less than 50 employees. The scheme will reimburse 25% of the wage costs, utilities and rent/leasing of equipment and production facilities for start-ups that have been operating for less than 3 years. The ERDF Small Start-up Grant Scheme Incentive Guideline is the official document governing this incentive and includes details relating to eligible costs, applicable aid intensity and State Aid regulations. (SBA)

Crowdfunding is a new way of investing to new ideas and start-ups. It is based on funding by a big number of people or simply a crowd. People often invest their money in small amounts via crowdfunding platform in website. Many start-ups invest their limited own sources to create a crowdfunding campaign and gain money for next stages of their entrepreneurship.

Results

The total European early stage investment market is estimated to be worth 7, 5 billion Euros. Business angels represent the biggest share of the investment market with 5, 5 billion Euros of investment, followed by the venture capital industry investing 2 billion Euros in early stages (pre-seed, seed, start-up capital and growth capital).

At the Business Angel Network (BAN) level, the average investment amount rises to 1,184 million Euros, an annual increase that shows a tendency for aggregation in BANs. Individual angel investment remains in the average of 20,000 Euros. With angel syndication becoming a common word across Europe, one could have had expected this figure to decrease. (SBA)

The importance of business angels to the equity capital industry has grown significantly in recent years. Equity from business angels and their associations is increasing and becoming more important than venture funds’equity in Europe. Raising money via crowdfunding platforms is popular with the public, but a crowdfunding investments ‘rate is still very low. Experts in start-up field expect a significant growth in the next decade of years. Crowdfunding represented just 1% of early stage investment in European region in 2013.
We proved, that angel investors create the major share in European venture capital. Their preferences in the sector of investment are different. Information technologies represent by 33% of invested venture capital via business angels. Manufacturing reaches 11% percent of share. ICT forestall other industries very brightly and we can observe a huge difference between ICT and Life sciences and Communication represented by 10% both. Other popular sectors are: Health care, Energy, Creative industry, Retail and distribution.

Start-up capital is the most popular form of capital with European investors including both business angels and venture capital funds. The figure 2 illustrates shares of particular types of venture capital invested in Europe.

Start-up capital represents 54 percent of a whole sum of funded venture capital in European region. The second position belongs to seed capital, which is the most common type of venture capital for 22% of European investors. Pre-seed stage has a higher risk rate and unpredictable return on equity in most of cases. Only business angels who have a tendency to put their money
into higher risk invest the pre-seed capital and they finance 11% of the whole European venture capital.

**Venture capital funds** invest to companies mainly dealing with life sciences. Information technologies and Communications are almost equal in the second place. Other popular sectors are: energy and environment, Consumers goods and retail, Consumers services. Live sciences have a major share in venture capital funds’ investments during the whole period between the year 2010 and 2014. The investment rate to ICT is stable, but trends in Communications are still slightly changing. Communication sector received more venture capital in 2014 than in 2013. That is a reason of the same position of ICT and Communication in 2014.

**Key.vi case study**

Key.vi is an IT start-up which operates in Slovakia. The Key.vi door entry system is built into smart phones. It allows people to open doors just by holding smart phone next to the lock. With Key.vi people can instantly replace standard bunch of keys. Key.vi has two security levels providing 100% protection and the system fits every door. Customer needs only a smartphone.

Key.vi as a global product that covers six market segments: key.vi HOME, key.vi AIR, key.vi HOTEL, key.vi AUTOMOTIVE, key.vi OFFICE, key.vi PUBLIC TRANSPORT. Key.vi team wants to form a key.vi holding company with 6 divisions representing six key.vi market segments. Each customer segment is specific and key.vi needs to choose sales strategy for every segment. Prices of products will differ within particular segments.

Key.vi solution is the unique combination of hardware including electronics and special door lock and software represented by key.vi mobile application. Smart phone communicates with a door lock thanks to a NFC or Bluetooth chip and sends a unique electronic key to the door lock for further processing. The door lock authenticates the user and opens the door.

IT start-ups are the most popular Slovak start-ups, but key.vi includes a hardware part of solution what makes it more original and more difficult to imitate. Hardware prototypes of solution are accompanied with higher costs and a longer time period of creation. Key.vi idea was created in the end of 2013. key.vi ideamaker and CEO Robert Gasparik has a technical background and he started to cooperate on key.vi solution with technical team of specialists in Sahy. During the first year of work Robert became a participant in accelerator program in Slovak start-up accelerator Flemio formed in 2015. Flemio invested first financial and human resources to key.vi and helped Robert to create a key.vi team.

Actual shareholders in key.vi are:

- CEO (Chief Executive Officer) Robert Gasparik: 49%
- Flemio start-up accelerator: 49%
- CTO (Chief Technical Officer) Martin Adam: 2%

Nowadays, key.vi is in the end of its seed stage and negotiates with potential investors and partners, who will join a team and support final product manufacturing and future sales. Key.vi is a global start-up with opportunities in many market segments. Final products differ slightly within particular market segments and every market segment is accompanied with different business strategy.

Key.vi is looking for a partner who will fund it by 243100 Euro to complete a minimum viable product, test it via early adopters and start final product manufacturing and sales. Table 1
summerases use of key.vi funding in mentioned phase. MVP finalistion, testing and final product launch roadmap is schelduled for seven months period.

Table 1: key.vi prognosis (made according to data from Flemio internal documentation)

<table>
<thead>
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<th>Key.vi use of proceeds</th>
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<tbody>
<tr>
<td><strong>Personal costs</strong></td>
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</tr>
<tr>
<td>CEO &amp; Project Manager</td>
<td>17 500 €</td>
</tr>
<tr>
<td>PR and Marketing Manager</td>
<td>9 000 €</td>
</tr>
<tr>
<td>CTO</td>
<td>21 000 €</td>
</tr>
<tr>
<td>HW Developers</td>
<td>57 000 €</td>
</tr>
<tr>
<td>SW Developers</td>
<td>60 000 €</td>
</tr>
<tr>
<td>Office integrator expert</td>
<td>12 000 €</td>
</tr>
<tr>
<td><strong>SubTotal</strong></td>
<td>176 500 €</td>
</tr>
<tr>
<td><strong>Production costs</strong></td>
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<tr>
<td>100 pcs</td>
<td>17 000 €</td>
</tr>
<tr>
<td><strong>One-off Costs</strong></td>
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<tr>
<td>Licences</td>
<td>2 500 €</td>
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<td>Intellectual Property</td>
<td>10 000 €</td>
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<td>Representation</td>
<td>15 000 €</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td>37 500 €</td>
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<tr>
<td><strong>Unexpected costs:</strong></td>
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<tr>
<td>10%</td>
<td></td>
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<tr>
<td><strong>Funding</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>243 100 €</td>
</tr>
</tbody>
</table>

There are several investors, who want to became key.vi partner. Start-up received two acquisition proposals by big global companies both resulting according to final product creation and European patent pending. Patent documentation is in process of preparation and final product will be completed in the end of 2016. key.vi needs funding to overlap a time period between status quo and future successful exit.

Future exit partners calculated Prognosis of Sales and Production according to their capacities and distribution network. Table 2 shows Production and revenues estimated for years 2017, 2018 and 2019. Producional costs and profit margin are variable because of economies of scale and choosen sales strategy. Key.vi has to handle negociation with multinational companies without experience with acquisition by global company.

Table 2: key.vi prognosis (made according to data from key.vi internal documentation)

<table>
<thead>
<tr>
<th><strong>Year</strong></th>
<th><strong>Production in pcs</strong></th>
<th><strong>Revenues</strong></th>
<th><strong>Gross margin</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>200 000</td>
<td>53 000 000,00 €</td>
<td>33 000 000,00 €</td>
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<tr>
<td>2018</td>
<td>600 000</td>
<td>159 000 000,00 €</td>
<td>99 000 000,00 €</td>
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<tr>
<td>2019</td>
<td>1 200 000</td>
<td>318 000 000,00 €</td>
<td>198 000 000,00 €</td>
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Key.vi management team wants to spread their list of future investors to acheive best conditions and networks for the start-up. We described most common ways of funding in European region such as business angels, venture capital funds, European research and development fund, crowdfunding, 3F (friends, family and fools). We focus on business angels and venture capital funds as two main forms of early stage investors.
Key.vi works on Minimum Viable Product and created strong team, which can overtake barriers in MVP constructing. Start-up has a detailed business plan including all market segment, but key.vi has not described sales strategies for particular customer group. Start-up is not able to handle global manufacturing and distribution and needs a partner with experience and network. We formed four important requirements for key.vi investor:

1. Support during future exit negotiation
2. Distribution channels for particular future divisions (nowadays segments)
3. Active role in decision making about sales strategy and priorities
4. Possibility of future funding in case of unsuccessful exit

Key.vi needs funding to finish seed stage and start start-up stage of the company. Individual business angels and business angel syndicates are most suitable candidates for future partners from this point of view.

The sum of funding is 243 100€. Individual angel investor. The typical range of business angel investment ends in 250 000€, where the average range of VC firms begins. Potential investor can belong to the most influential business angels or smaller VC companies. Key.vi should focus on European business angel syndicates because of higher volume of investment in comparison to individual angels.

Start-up actual situation and current stage expels 3F funding, crowdfunding and company owners are not willing to use resources from European research and development fund due to negative experience in the past.

Both VC funds and business angels prefer to invest in their home country and to the industry of information technologies. On the other hand VC firms are more powerful and can be able to meet key.vi conditions in a more effective way.

According to the research, we recommend key.vi to negotiate with European business angel syndicates and local venture capital funds. Members of angel syndicates are more likely to have a suitable experience with exiting global company and networking to provide distribution channels. VC funds usually require big shares in future companies and they are more likely to take a risk in comparison to business angels. Key.vi patent has not been pended yet and if we consider a risk of unsuccessful exit and possibilities of future funding streams, the smaller VC funds could be the best choice.

Key.vi start-up should concentrate on mentioned two tight segments of investors and consider their particular experience in IT field and proposals.

**Conclusion**

The article analysed venture capital, start-up investors and the actual status of start-up investments ‘flow in European region. We specified venture capital types, such as pre-seed capital, seed capital, start-up capital, growth capital and expansion capital. We characterised typical start-up investors including 3F (friends, family and fools), business angels, venture capital funds and the users of equity crowdfunding platforms.

We focused on start-up investments in European region mainly made by business angels and VC funds in form of venture capital. The research data were based on two main statistics: The statistic compendium by EBAN and several statistical materials by Invest Europe Association.
7.5 bn of Euros were invested to early stage companies in 2013. 73% of European venture capital were offered by business angels. Venture capital funds invested less than 2 bn of Euros represented by 26%. The third position belongs to equity crowdfunding represented by 1% of invested money of simply 80 millions of Euros. Business angels are the most influential European VC investors and 96% of their finances flow to their home-country.

We analysed the case study of start-up key.vi, which is in seed stage and negotiates with future investors. Key.vi can by specified as an IT start-up, because its product is a combination of hardware and software. Key.vi enables people to open and unlock doors via mobile phone. We created the list of requirements for key.vi investor including support during future exit negotiation, distribution channels for particular future divisions (nowadays segments), active role in decision making about sales strategy and priorities, possibility of future funding in case of unsuccessful exit. We consider key.vi as a very potential IT start-up with a real chance of successful exit. Key.vi will need experienced partner with spreaded network. We recommendet key.vi the negotiation with European business angel syndicates and smaller venture capital funds with successful start-ups in IT field.

References


FLEMIO Start-up accelerator: Internal documentation. 2015


KEY.VI: Internal documentation. 2015


MALTA - List of Beneficiaries of EU Funding through the European Regional Development Fund 2007-2013


The Impact of the Financial Crisis on the Capital Market in the V4 Countries

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Abstract

European financial and capital markets went through a turbulent period of rapid fall and rebounding rise in the form of development in recent years in the context of integrity processes and overall functioning. The financial crisis has given further impulse to the continued development of European structures and the convergence of the V4 countries towards developed structures. The aim of this scientific research is based on the available theoretical and empirical knowledge with the usage of statistical quantitative examination as part of econometric methods and models in real economic applications and on the basis of application analysis and comparison to define the financial market, capital market, their segmentation, tools of functioning in the Visegrad conditions and to highlight the impact of the financial crisis on capital markets in the V4 countries during the crisis period of the years 2008-2012. The scientific contribution will be evaluating and reflecting by statistical analysis the development in financial markets in the V4 countries affected by the financial crisis. Knowledge of financial market and its development in the countries of Visegrad serves as the basis for all individual economic decisions of market subjects and clusters in terms of financial management, while providing guidance on the application of standardized or adapted decisions under crisis development in a complex international environment, with the usage and processing expertise from renowned foreign and domestic authors and particularly amending the scientific research issues.

Keywords: Financial Market, Capital Market, Financial Crisis, Visegrad Group

JEL Classification: D51, O4, O16

Introduction

Financial markets represent one of the essential parts of the financial system, so naturally their basic understanding is therefore a key moment for the understanding of the whole financial system, which operates in every market economy. All activities related to monetary site of transactions, such as payments for goods and services, payment of debts, savings, investments, lending and borrowing, are conducted through a variety of financial instruments, a number of financial institutions and on various financial markets. The financial system is therefore according to Howells formed by three basic elements reflecting its real - factual and financial site. These essential elements of the financial system are financial instruments, financial markets and financial institutions, being mutually dependent and interconnected.

Furthermore, financial system facilitates transfer of saved surplus funds from entities, which are generating savings, to deficit economic operators, while the transformation of savings into the investments may be effectively implemented by financial institutions such as banks or through financial markets (Bain, 2007). The role of the financial market is therefore to transfer funds from entities that have a surplus to entities with deficits, delineated as channels through
which are savings reconciled with investments. These channels have nowadays not only national but also international character. In recent decades, financial markets are strongly influenced by globalization, considering the fact that the global interconnection of markets is reflected into the international movement of capital, securities trading in domestic and foreign markets, in valuation of various financial instruments, and other aspects (Mishkin – Eakins, 2015).

Scheme 1. The Basic Division of the Financial Market
Source: Matthews – Giuliodori – Mishkin, 2013

Financial markets show a certain institutional form, they are internally structured and as systems they consist of several submarkets and segments. A common feature of all financial markets is the fact that they pave a platform for the transfer of funds from lenders to borrowers from surplus to deficit economic entities. On the other hand, the individual segments of the financial markets have a number of specific characteristics by which they differ. The mechanism of functioning of the various financial markets segments creates an environment for support and deeper understanding the nature of their behavior and functioning. Therefore, their interpretation is based on different classifications of financial markets. One of the most important classifications according to Matthews is in the terms of the maturity of financial instruments, segmentation on the money markets and capital markets, shown in the Scheme 1 (Matthews – Giuliodori – Mishkin, 2013).

As we have mentioned, the most commonly used segmentation criteria of the financial market from the aspect of time, is division on the money and capital market. In this article we will focus and closely analyze capital markets of the Visegrad Group during the financial crisis period. By money markets we understand markets with short-term loans and financial instruments; having a maturity less than one year. These markets are mainly entered by those subjects who have a temporary deficiency of funds and need to borrow. On the contrary, capital markets are related as opposed to money markets with long-term investments and the related financial instruments.

Another equally significant breakdown of the financial market is on primary and secondary markets. Primary markets are known for trading with new issues of securities (bonds) that are in the market for the first time. In the secondary markets there are being sold previously issued securities, while their main role is to provide liquidity for investors who are investing into securities. Secondary markets are by this fact increasing their attractiveness, and because they also set the price, they accelerate trading in the primary markets. Moreover, secondary markets
can be organized as open exchanges consisting of traders who are equipped with a basic supply of securities and they are prepared to sell and buy from anyone who agrees to their prize.

In specialized literature we also come across financial markets segmentation into prompt, term and options markets. Spot markets are markets where the securities are traded by immediate delivery, generally 1-2 working days. Term markets are dedicated into trading contracts for delivery financial instruments in the future with the objective of reducing risk. Lastly, options markets offer investors the opportunity to reduce the risk of adverse changes in the prices of securities (Blunden – Thirlwell, 2013).

Methodology

The aim of this scientific research is based on the available theoretical and empirical knowledge with the usage of statistical quantitative examination as part of econometric methods and models in real economic applications and on the basis of application analysis and comparison to define the financial market, capital market, their segmentation, tools of functioning in the Visegrad conditions and to highlight the impact of the financial crisis on capital markets in the V4 countries during the crisis period of the years 2008-2012. The scientific contribution will be evaluating and reflecting by statistical analysis the development in financial markets in the V4 countries affected by the financial crisis.

Results and Discussion

Capital Market, Segmentation and its Tools

This part of the research is devoted to the capital market, a market of long-term financial instruments, while as a criteria of long-term duration is generally referred to maturity longer than one year. As each segment of the financial market, it deals with surplus and deficit units among which almost always enter financial intermediaries. Besides that, the financial system as a whole and the financial markets are fairly strictly regulated be state, which is influencing the institutional structure of the financial system as a whole and by developing the legal, technical, or other conditions and prerequisites for their functioning. In the European Union (EU), the adjustment of regulation of financial markets and their specific institutional arrangements is in the national hands. Capital markets in the Visegrad Group (V4) and other new EU member states are considered to be relatively small, because they carry and quote low annual trade volume of securities issues, while their liquidity in comparison with developed markets is relatively small. If the emissions are within the securities offered to the general public, it is called a public issue of securities (IPO market). Some securities are offered in advance to a defined group of investors who are familiar with the situation of the issuer, and often do not require a copy of the prospectus, in this case it involves a private issue, which takes place on the primary non-public market. Already emitted securities are then sold and purchased by other investors in secondary-market operations (Veil, 2013).
Scheme 2. The Basic Division of the Capital Market

Source: Veil, 2013

Stock market as an economic category is a special form of the market, requiring a special permit (license) in order to run operations and as an institution it has the form of a juridical subject. Additionally, it has exactly defined types of stock exchange transactions that may be performed. This market can be entered only by certain entities which have membership on the stock exchange and the relevant trade authorization, while the conditions under which business is done are standardized. Goods which are traded on this market are physically not present and the market is to a greater or to a lesser extent under state supervision. Stock markets are places where capital meets offer and the demand for it, mediating financing of large long-term investments. Capital market would be not able to operate without well functioning stock markets, which are supposed to effectively collect and redirect available capital national economy-wise.

Shares and bonds are considered to be the major and most significant capital market instruments. That’s the reason why the market is sometimes called securities market. Share is an equity security, which is connected with shareholders' rights. Owner of shares (shareholder) has the right to participate in managing of its profits and its liquidation in company. Shares are among the most widespread and the most-traded elements on the capital market entailing a right to participate in management, the right to share in profits and the right to participate in the liquidation balance of public limited company. Shares represent a specific portion in company's capital, having a well-defined nominal value in monetary terms. However, bond is a security, which carries the right of its owner to demand repayment of the outstanding amount in nominal value and thereof payment of the proceeds to a certain date and as well obligation of the authorized person to issue bonds to fulfill these obligations (O'Brien – Gilligan, 2013).

The Emergence and Development of Capital Markets in the V4 Countries

Stock exchange securities in the V4 countries (The Visegrad Group (V4) is an alliance and a regional structure of four Central European countries - Slovak Republic, Czech Republic, Hungary and Poland, member states of the EU and NATO with the same values, a common history, culture and geographical position. V4 is a dynamic regional grouping which creates international space for strengthening coordination and consultation mechanism with a trend of
finding common positions and standpoints on topical issues of foreign and European policy, regional development, economic and cultural cooperation.) takes place usually low annual volume of transactions in securities and the stock exchange quotes a relatively small number of securities issues. In the Central region and also between smaller economies, however, the leadership has gradually acquired the Warsaw Stock Exchange (WSE), both in terms of number of securities listed (quotes) on a stock exchange, and in terms of total market capitalization. In particular, trades on WSE are being realized with more titles than on the Vienna Stock Exchange. It is fair to state that capital markets of the V4 countries are still looking for the optimal structure and form but they present irreplaceable in these economies. Moreover, capital markets in the Central region have to face growing amount of pressure especially in the last in the last years, caused by internalization. Specifics of the capital market origins and formation in the case of Slovakia and the Czech Republic are bolstered throughout the process of transformation of a centrally planned economy to a market economy during the 90s in the 20th century. One of the characteristics was voucher privatization, which significantly influenced the rise of the capital market in both countries, which has caused that the emergence and development of capital market in Slovakia and Czech Republic is in many ways different from development in Poland or in Hungary. In general, the price of traded financial tools is on financial markets generated through supply and demand which establishes income and interest rates (Polouček, 2010).

Therefore, the functioning of financial markets is extremely important not only from macroeconomic, but as well as microeconomic aspect. Functioning of financial markets is a subject to regulation by the state. In Slovak Republic, as in some other countries the integration and supervision of financial market has been entrusted to the National Bank of Slovakia. Stock markets are of particular importance for trading on the financial markets, which are one of the key components of capital markets, where stock exchange trades can be excluded through its members and the activities of stock exchange (BCP) in the V4 countries is based on a membership basis. Currently, the stock exchanges are mainly electronic where the exchange prices for which the securities are trade must be published. For this purpose, the V4 countries use price lists, which in addition to the prices of securities often also contain further supplementary information. From market prices of selected stocks there are also regularly formed aggregates indicators - indexes and averages that reflect the current status and development trend of the stock market (Malacká, 2012).

**The Behavior of Financial Crisis and its Impact on the Capital Market in the V4 Countries**

Within a certain economy, there may be a variety of events that threaten its smooth running by being exposed to a various shocks such as supply shocks (significant changes in the prices of essential commodities such as food, gold, oil, etc.), capital flows shock, foreign exchange shocks (need absorption or provide liquidity for the money market on a large scale, or the need to support the market to adjust the exchange rate), liquidity shocks, credit shocks, monetary shocks and others, which may lead to crisis. However, not all shocks must necessary grow into a financial crisis. Financial crisis can be also caused by such events as economic recession, the inability of the state to fulfill international obligations (debtor crisis in the 80s), ineffective management system of a certain segment of economic policy (the crisis of ERM between the years 1992-1993), failure of regulators, crash of relevant financial institution of international importance (Enron) and others. In any case, each disruption of the smooth functioning of the economy negatively affects the lives of its participants (Casu – Girardone – Molyneux, 2015).
The financial crisis that broke out in 2008 under the pressure created from bursting of the real estate market bubble in the U.S. has forced central banks to significant changes in monetary policy. The world's key central banks (FED, ECB, Bank of England, Bank of Japan, Swiss National Bank) responded to the problems of the banking sector by enhanced credit support and monetary easing. All upper mentioned central banks have acceded to reduce its key interest rates at historic lows. Expansive monetary policy of central banks in the form of low interest rates was primarily directed until the year 2010 directed into stabilizing the global market. However, neither low interest rates nor monetary easing were able to significantly promote financial market stability in 2008, after the collapse of U.S. investment bank Lehman Brothers, central banks acceded to a non-standard monetary policy tools. FED was the first one to use quantitative easing monetary policy, which is a direct purchase of financial assets from the market for the balance of the central bank. This was primarily focused on U.S. government bonds, debt securities linked to the property market and government bonds supported by real estate agencies.

The first round of quantitative easing was launched by FED in March 2009 by the volume of 300 billion USD and the second round in November 2009 by the volume of 600 billion USD. Currently, FED is executing so called Permanent Open Market Operations (POMO) when it is not filing any new USD liquidity through the purchase of financial assets from the market, but buying the assets only of expired financial assets on its balance sheet. This step helps to keep its balance on a stable level. Since the summer of 2011, FED pours back on the interbank market liquidity, in monthly average, the amount of 20-25 billion USD (Bruun, 2014).

The European Central Bank (ECB) has started to respond to the financial crisis later than the U.S. Federal Reserve. In summer 2008, even under aggressive pressure from rising inflationary risks (while price stability is a primary objective of the ECB) it has proceeded to racking up its base rate by 25 basis points to existing historical highs of 4.25%. In 2009 the ECB started to providing an unlimited amount of cheap euro liquidity of a 12-month refinancing operations at a fixed interest rate (at that time 2% p.a.) to 36 European banks. This was due to continuously growing problems in the European interbank market where interbank rates despite ECB base rate failed to decline, while significantly dampened the ability of the European economy rebound. This step was repeated even in 2010, 2011, 2012, and in a much more aggressive way. At the same time under the pressure of the deepening of financial crisis in Europe, which has reflected in the public finance crisis in 2010, the ECB has acceded to other non-standard elements of loosening the monetary policy. It has expanded the list of eligible securities serving as collateral in ECB refinancing operations.

The V4 countries have after the process of reformation, related to the transition to a market economy, ranked among emerging market countries. Slovak and the Czech Republic are currently classified by the IMF as advanced economies (Slovakia being part of the eurozone and the Czech Republic within the framework of other developed countries), while Poland and Hungary remain as a developing economies. However, the growth performance of the V4 economies was slowed down during the financial crisis, which has from the form of mortgage crisis in the U.S. transferred through international trade links and financial intermediation also to the Central Europe, particularly in the form of real economy crisis and later into the financial crisis. Scale of the crisis forced governments and monetary authorities to common step in the fight against its negative consequences. Economic developments in the Central European Region in 2009 were strongly marked by the ongoing global economic crisis. Czech and Hungarian economy recorded an annual decrease, while Poland was the only economy to maintain growth. However, this growth slowed significantly compared to the previous year.
Economic growth was dampened mainly by the fall in stocks and investment, but also by a significant reduction in exports due to low foreign demand. Average annual inflation slowed in all countries, particularly in the Czech Republic where inflationary pressures dampened development in commodity prices and has caused weak domestic demand. Compared to the previous year growth of energy and processed food prices have slowed down in the Visegrad region. Exchange rates continued relatively rapid depreciation. After a decline in global risk aversion and common verbal intervention of individual central banks, has occurred a correction in the domestic rates which have recovered relatively quickly against the euro. In an effort to reduce the negative effects of the economic crisis and to support domestic economic activity and the banking sector, all central banks in the Central Region reduced interest rates. For example in the Czech Republic and Poland, the key interest rates were lowered to historic minimums (Ringe – Huber, 2014).

**The Financial Crisis and Its Impact on the Capital Market in Poland**

Polish economy was after the year 2008, the only one in the region and throughout the EU that kept an annual growth. However, the growth had slowed down from the previous year by 3.3 percentage points to 1.7%. In comparison with the Czech Republic and Hungary Polish economy had benefited primarily from maintaining the growth in domestic consumption and a lower drop in investment demand and inventory. Significant weakening of the exchange rate had also a favorable impact on foreign trade, whereas the contribution of net exports to GDP growth was the highest among the other V4 economies. Inflation rate increased gradually from the beginning of 2009 until July effected by adjustments of some regulated prices and excise taxes. Subsequently the price growth was slightly cushioned and stabilized. Compared to 2008, the average inflation in 2009 decreased by 0.2 percentage point to 4%, mainly due to a slowdown in energy prices and food processing. The persistence of risk aversion in early 2009 had in the case of Polish zloty resulted in weakening of the exchange rate in mid-February compared to the beginning of the year fell by almost 15%. Subsequent correction and strengthening against euro was partly dampened by tense developments in the Baltic countries. In the first half of the year Polish zloty was influenced the expectations of its possible entry into ERM II. From short-term the rate was also influenced by the April 2009 notification on providing flexible credit line from the IMF to Poland. In the second half of the year, especially since August 2009, the exchange rate has been throughout the region stabilized. Compared with the end of the previous year, the Polish zloty had appreciated by 1.2%.

Reference interest rates were govern by the central bank in Poland a total of four times when in January 2010 the rate was reduced by 0.75 percentage points and in February, March and June by 0.25 percentage point to 3.5%. During the second half of the year interest rates has not changed. By interest rate cuts, Narodowy Bank Polski (NBP) has responded to the economic downturn, as well as low credit activity of the banking sector. In order to promote lending the central bank had also acceded the reduction of minimum reserves in May and in September it had introduced new tools to support the financing of commercial banks. Interbank market was stabilized throughout the year 2010 as well as in Hungary by the active use of swap lines increasing liquidity in Swiss francs. In the last quarter of 2011 compared with the previous quarter the Polish economy has strengthened by 0.2%. In the annual comparison GDP has increased by 1.1%, while in the third quarter of 2012 it grew year-over-year by 1.8%. In 2013, the Polish economy has strengthened by 4.3%. This year's Polish national budget envisages economic growth for this year by 2.2%. Analysts are less optimistic and assume that the Polish economy will strengthen in the best case by 1.5%.
International rating agency Fitch confirmed the rating of the creditworthiness of Poland and the country's outlook has improved from stable to positive. The deficit of the Polish public finances, namely after 2010, fell by about 4.5 percentage points to 3.4% of overall GDP in the end of 2012. Poland has thus within the EU joined the countries that consolidate their public finances at the fastest pace. Warsaw also stabilized its public debt, which has dropped at the beginning of 2014 to 54.5% of GDP after having culminated in 2011 at 56.4% of GDP. Sustainability of public finances in the medium term is nowadays supported by the reform of the pension system from 2012 (Polish National Bank, 2016).

**Warsaw Stock Exchange**

![Graph 1 Development of WIG](http://www.tradingeconomics.com/)

**Graph 1 Development of WIG**

Source: http://www.tradingeconomics.com/, 2016

Giełda Papierów Wartościowych Warszawa (GPWW) represents a tradition of Polish capital market which dates itself back to 1817, when the first commercial exchange in Warsaw (Warszawska Giełda Kupiecka) was launched. In its present form it started operating in April 16, 1991 in electronic form. The Exchange has several indexes: WIG20 (the main index includes the 20 largest and most exclusive companies’), mWIG40 (includes 40 medium-sized companies), sWIG80 (includes 80 small companies) TECHWIG (includes index of technology companies), WIG - the widest index (has included 324 companies in 2008). Polish capital market came to life after fifty years of break in early nineties. An essential feature of the Polish capital market was that the people in this country did not receive shares for investment or coupons for similar exchanges "securities", while they paid money for shares. Detailed rules and procedures of the stock exchange in Warsaw were created and aroused with the help of the French Société de Bourses Française and the central deposit of securities in France.

The Basic Law on public turnover of securities was approved by the Polish parliament in 1991. Thus were created the legal basis for the capital market institutions in Poland. Nowadays, they consist of brokerage houses, stock exchanges, pension funds, investment funds, Securities Commission and the Stock Exchange. Companies whose securities are traded on the stock exchange are divided not only by type of activity, but also by the volume of sales and earnings, book value and capital. Principal market is dedicated for the largest companies, the side one is dedicated for medium-sized companies and free market is for smaller or only a short time existing companies. The indicator of market status is Warszawska gieldowy index - WIG, which is calculated as the average share price of all companies which are being traded on the stock exchange.
The development of the Polish stock index WIG is shown in the graph from the first trading day of 2008 until the last trading day of 2013 (Warsaw Stock Exchange, 2016).

**The Financial Crisis and Its Impact on the Capital Market in Czech Republic**

Although the Czech economy was not directly affected by the financial crisis, the impact of global shocks could not be avoided. The Czech financial system, however, remained stable during the crisis and its position was relatively strong, and therefore it was able to face the negative second-round effects of lingering recession. Under the impact of crisis in 2009, GDP was reduced by 4.8%, while for example in the previous year it grew by 2.5%. Furthermore, stocks and investment demand declined significantly. As well as growth in domestic consumption also net export was compared with the previous year lower. The average growth in price level in 2009 slowed down by 5.7 percentage point to 0.6%. A significant slowdown in inflation was affected mostly by developments in commodity prices and the base effect of high price increases in the previous year due to changes in regulated prices and tax rates. Rise in energy prices, services and processed food slowed down so naturally the prices of unprocessed food and industrial goods decreased as well.

At the beginning of 2009, the Czech crown continued to weaken. The reason was mainly for this was mainly negative sentiment towards the emerging economies of Central and Eastern Europe. Since the beginning of the year until mid-February, the crown against the euro depreciated by nearly 9%. In the following period until the end of the year, Czech crown due to the gradual reduction of risk aversion corrected previous development and compared to the end of 2007 against the euro appreciated by 1.5%. The Czech National Bank in 2009 reduced its key interest rates four times. In February it lowered its two-week repo rate by 0.5 percentage point and in May, August and December each time by a quarter of a percentage point to 1%. By lowering interest rates, CNB tried to partially correct the negative impacts of the global economic crisis on the domestic economy and banking sector. The easing of monetary policy also contributed to the absence of significant inflationary pressures. In the following years the main risk scenario for Czech economy remained pronounced slowdown in economic growth in Germany and other countries which are important trading partners of Czech businesses.

The greatest obstacle to more dynamic recovery of domestic demand at that time was the tense situation on the labor market and the need to implement further fiscal measures needed to reduce structural deficits in public budgets. It was assumed that the dynamics of income would remain significantly subdued, which could negatively affect mainly the household economy and their ability to repay earlier loans. Persistently high unemployment and wage growth in 2010 was reflected in an increase in defaults of loans mainly for consumer loans. The dynamics of bank loans in the Czech Republic continues to remain highly subdued. Debt crisis in eurozone remained gradually deepened and became a greater source of uncertainty also in 2011. Some highly indebted countries have applied, under the problem of refinancing a steep rise in required yields on government bonds, aid from the EU and the IMF. The Czech Republic was in 2012 one of the few economies in the group of developed countries with lower levels of public deficit thanks to budgetary measures. The situation in financial markets slowly softened and partially stabilized in 2013. While in the first phase of the crisis, the credit premium of Czech government debt increased significantly, investors started to increasingly differentiate among countries and the Czech Republic ranked among the safe economies. The decline in real estate prices was manifested in the severe contraction of residential construction in the next years. Development from the perspective of the Czech financial sector was, according to experts in the last two years positive. In the area of capital adequacy, profitability and balance sheet
liquidity maintains the banking sector as a whole a good position and remains independent from internal financing (Czech National Bank, 2016).

**Prague Stock Exchange**

![Graph 2 Development of PX](http://www.tradingeconomics.com/)

For securities trading in the Czech Republic on the Czech Capital Market, there are two organized markets, namely: Prague Stock Exchange, a. s., which was established in the year 1992 (PX and PX-GLOB Index) and RM-System a. s., which operates since 1993 as the organizer of the OTC securities market. Prague Stock Exchange (PSE) is the largest and oldest organizer of the securities market in the Czech Republic. After fifty year break caused by World War II and the communist regime it was reopened in 1993 and linked to the activities of the Prague Commodity and Stock Exchange founded in 1871. PSE forms together with its subsidiaries PX group and is a part of CEE Stock Exchange Group, whose members are also three Central European stock exchange, namely the Vienna Stock Exchange (Wiener Börse), Budapest Stock Exchange (Budapest Értéktőrzsede) and the Ljubljana Stock Exchange (Ljubljanska Borza). Trading in the PSE is done through licensed securities dealers who are members of the stock market - mainly the major banks and brokerage companies. Trading volume of shares and bonds on the PSE had since 2008 had a downward trend. While in 2008 the volume of bonds was 852,042.49 million Czech crowns, in 2012 this amount was reduced to almost by a quarter by 236,541.47 million Czech crowns. Regarding the volume of trading shares decline was less dramatic. After 2008, when the trading volume of shares on the PSE was 643,151.30 million Czech crowns, in 2012 it was 594,052.62 million Czech crowns (Prague Stock Exchange, 2016).

**The Financial Crisis and Its Impact on the Capital Market in Slovak Republic**

The deepening of financial crisis, beginning of economic crisis and the preparation for joining the eurozone in 2008 were the main drivers, sharpening the developments in the Slovak financial sector during this period. The global financial crisis that broke out at the beginning of the second half of 2007, has caused during the whole year of 2008 a significant global turbulence, and especially at the turn of the third and fourth quarter picked up even more on the severity, to the extent that it has threatened the very functioning of the global financial system. Uncertainty and falling confidence in the financial markets resulted in a significant drop in the
price of financial assets. The impact of this phase of the financial crisis on the domestic financial sector was compared to other V4 countries relatively modest. Especially in the banking sector it has caused only relatively milder impact because of the strong links between the domestic economy and only a negligible proportion of assets to foreign countries. However, financial crisis has manifested more significantly, especially in the collective investment and pension savings. From the clients' perspective, it was primarily seen as a reduction in profitability (in many cases down to the level of negative nominal annual rate of performance) of products in which they have invested equity in global and partly bond or other markets. Financial sector institutions were touched by the financial crisis by reduction in the volume of assets in some segments and by the decrease in profitability. The global financial crisis initially directly affected the domestic economy and the financial sector. Because of excess liquidity in Slovakia problem of refinancing banks was avoided, while banks had sufficient domestic business opportunities and they were applying conservative business models and have been using just a minor share of innovative financial instruments. In order to avoid possible unjustified outflow of funds Slovak National Bank (NBS) tightened the rules for short-term liquidity.

Neither healthy financial sector nor the establishment of euro could protect Slovakia against the negative influence of the global economic recession. After several years of rapid growth period, Slovakia recorded in 2009 a significant fall in GDP. The decline was most notable in the first quarter and during the year it has gradually slowed. Nevertheless, the Slovak real GDP decreased on average in 2009 by 4.7%. Decisive influence had unfavorable developments in external demand. Lower economic activity had reflected into deterioration in the labor market, the number of employed was reduced and the unemployment rate rose. Due to the high level of openness and proportion of cyclical sectors, Slovakia was among the EU and V4 countries hit pretty hard by the global economic crisis. Domestic economic policy reacted to this situation by adopting several measures. Fiscal policy has focused on promoting the usage of EU funds and PPP projects. Slovakia had also joined the European recovery plan. The support for selected public financial institutions was reinforced and full protection of deposits was temporarily reintroduced. Monetary policy has gradually reduced its base interest rate to 1% by 225 points during the year 2009. With increasing severity of the global financial and economic crisis ECB decided to use additional non-standard measures. This was particularly the full satisfaction of demand in refinancing operations at a fixed rate, expanding the list of eligible collateral, the extension of maturities of refinancing operations, swap transactions in other currencies, and purchase of secure securities denominated in euro.

In order to create legal conditions to effectively combat the global financial crisis, NBS prepared in 2013 anti-crisis laws that allow stabilization aid for commercial banks on financial intermediation and financial counseling. The aim was to introduce the same rules for the performance of brokerage and advisory activities in the insurance and reinsurance sector, capital market, supplementary pension savings, lending and deposit-taking sector. This legislation is similar to the laws adopted by other EU countries. Unlike other EU countries, Slovakia has adopted these laws only for precautionary reasons and in order to enhance legal certainty in the event of an emergency financial situation (Slovak National Bank, 2016)
Bratislava Stock Exchange

Stock Exchange in Bratislava (BSE) was established on 15 March 1991 in accordance with the decision of the Ministry of Finance in 1990 and trading on it began on April 6, 1993. It is the only organizer of the securities market in Slovakia. Activities of BSE are based on a membership principle; its members may be the only subject that is a securities dealer, or a management company. After fulfilling the legal requirements and stock ex-change rules, BSE shall accept new member. A subject authorized to trade on the stock exchange is according to the law National Bank of Slovakia, which does not procure the purchase or sale to third parties. BSE organizes securities trading on any regulated market and on the multilateral trading system - MTF. The regulated market is divided on listed securities market and regulated market. On a regulated market objects of transactions are stocks, bonds and units of closed-end investment funds. Share index of BSE is The Slovak share index - SAX, which is a capital-weighted index and reflects the overall change of assets connected with investing in shares included in the index. SAX index includes only the shares of listed securities companies and OTC trading is performed on over-the-counter markets. At the end of the year 2008 BSE registered 191 issues of shares and units and 136 bond issues and during the year (in February and October) BSE has registered on the regulated free market two share issues worth a total of 19.12 million €, while ceased trading in 36 share issues worth 167.68 million €. Compared to December 2007 it therefore presented a fall in the number of registered issues of shares by 27.9%, while the decline in financial volume was 1.41 billion €. In the case of bonds, BSE has registered 27 new issues of mortgage bonds in 2008 totaling 0.4 billion € and 800 million CZK of already registered government bonds were increased by tranches worth a total of 1.32 billion €. On the main listed market there have been added 1 issue treasury bills worth 1.5 billion €, there were also registered 5 issues of corporate bonds worth 85.19 million €, 4 issues of bank bonds worth 50 million BGN and 20.25 million € and one bond issue in the amount of 7.43 million €. In this period it had expired 16 issues of mortgage bonds and 4 issues of bonds worth 0.36 billion € and 20 million BGN, 3 issues of government bonds worth 1.58 billion € and 2 issues of corporate bonds worth 16.6 million €.

The total market capitalization of equity securities and bonds listed on the BSE amounted to 20.6 billion € at the end of the year 2008, which compared to the end of the previous year represents an increase of 1.89%, respectively 0.38 billion €. The market capitalization of shares and participation certificates at the end of 2008 recorded a decline by 26.7% to 3.88 billion €.
SAX index had highly volatile course subjected to very low number of components, so it closed at the level of 359.18 points. In December 2008, representing an annual decline of 86.5 points. The market capitalization of bonds on the other hand recorded an annual increase of 12% to 16.72 billion €. SAX index concluded the year 2012 at 192.21 points and compared to the end of the previous year it had fell by 10.79%. The last trading day of 2012, BSE had registered on its market 88 share issues by 69 issuers. There were placed six issues on the parallel listed market and 7 issues on the regulated free market, trading in 75 share issues. The market capitalization of equity securities traded on the BSE markets by the end of 2012 recording a year on year decrease of 4.15% to 3.5 billion €. The real market capitalization except for shares amounted to 3.39 billion € which represents year on year decrease of 5.63% and was involved in 96.86% of the total market capitalization of the stock market. The market capitalization of the share issues placed on the market of listed securities recorded at the end of 2012 10.35% decline to 1.95 billion €.

During the reporting period, the annual volume of trading in shares (including mandatory takeover bids) in absolute terms amounted to 126.39 million € over the comparable period of 2011 and recorded a decrease of 63.74%. Shares of domestic companies were part of 12,560 transactions, in which they traded 5,190,441 units of equity securities. On-year basis, this represented an increase in the number of concluded 68.93% transactions by the decline in the number of traded securities by 69.5%. In 2012 there was made 508 direct transactions with equity securities in the financial volume of 68.3 million € and 12,052 electronic order book transactions with the achieved business volume of 58.09 million €. On-year basis, this meant 29.2% increase in the volume of electronic order book transactions also achieving a 77.5% decline in the volume of direct financial transactions (Bratislava Stock Exchange, 2016).

The Financial Crisis and Its Impact on the Capital Market in Hungary

Hungary's economy decreased in 2009 by 6.3%, while in 2008 it grew by 0.6%. There was a significant fell in gross capital formation and also strengthening the decline in domestic consumption. At deeper cuts in import compared with export, the net export was the only component that contributed positively to GDP growth. Price growth, which was in the course of 2010 gradually accelerating, directly affecting the depreciation of the forint and particularly was the cause in increased rate of VAT and excise duties. Weak domestic demand, however, dampened into the transmission of higher taxes on consumer prices and inflation compared to 2008 slowed down by two percentage points to 4%. Energy prices, processed food and services prices grew particularly slowly. The rate of the Hungarian forint in the early 2009, as well as the rest of the countries in Central Europe depreciated, while weakening lasted until early March. The exchange rate was in addition to global factors also reflecting the weak development of the Hungarian economy. Gradual decrease in the high risk aversion in financial markets, as well as a partial restoration of confidence in the Hungarian economy and the successful drawdown of the loan from the IMF worked in the subsequent period of recovery of the Hungarian forint against the euro. A relatively sharp correction of previous development lasted until the beginning of August. Subsequently, the course was partially stabilized. Compared with the previous year, how-ever, the forint weakened by 1.4%.

National Bank of Hungary (Magyar Nemzeti Bank) in 2009 lowered interest rates seven times by a total of 3.75 percentage points to 6.25%. Its key interest rates were being decreased, except for the session of the second half of the year, mainly due to weak demand and stimulating the domestic economy. To the reduction in interest rates from relatively high levels also contributed decreasing risk aversion in global markets, restored confidence in the Hungarian economy and
the stable exchange rate of the forint and the favorable inflation development. In 2009 MNB signed a swap agreement with the central banks of the euro area and Switzerland on providing liquidity in Swiss francs and introduced new lending instruments. The reason for these steps has been to further strengthen and stabilize the domestic financial market and support the banking sector. The growth of the Hungarian economy in the last months of 2011 has visibly slowed and turned into stagnation in the second quarter due to which the overall growth rate fell to just 1.5%. Strong foreign demand that characterized the beginning of the year and which represented an important engine of growth of GDP has apparently declined significantly. Leading indicators for the upcoming months in 2012 suggested a further weakening of economic growth. Index of purchasing managers in the manufacturing sector fell to 50.1, indicating only a very slight increase. Neither the business climate and consumer confidence had any reason for optimism. Inflation was by contrast, market participants once again a positive surprise decline more sharply than expected. Consumer prices rose year on year by 3.1%.

The forint was weaker in August 2011 and like most of the other currencies of the region. Rate of Hungarian bonds recorded significant fluctuations being depended on the willingness of investors to go into risky investments and have concluded with a slightly higher balance. However, they were not able to offset the negative impact of currency depreciation for the investors accounting in euros. From the long term point of view, the level of Hungarian yields continues to appear as attractive. In the short term, however, the Hungarian bonds depend on the willingness of investors to take risks, and therefore continue to face higher volatility. Hungarian stock market declined in August 2011 about 15% and was one of the weakest in the region. Especially big loss suffered heavy weight in the OTP index, which has lost nearly a quarter of its market value. This bank title has suffered due to the continued appreciation of the Swiss franc. Approximately two thirds of Hungarian household loans are denominated in Swiss francs and the massive appreciation of the franc (from the beginning of 2008 by almost 40%) represents for them an increasing problem and significantly increases the number of problem loans, which have a negative impact on consumer spending and lending by banks even up to date. Hungary continues to struggle with a high inflation. In 2012, the average inflation rate was 5.7% and the base interest rate was adjusted by 125 basis points to 5.75 percent.

The Hungarian economy fell deeper into recession in the fourth quarter of 2012, as estimated. The reason for the deepening of the economic crisis was the decline in activity of the Hungarian industry and agriculture. According to the statistics, 47 GDP products of Hungary fell year on year by 2.7% only during the period of three months till end of December 2012. This was worse than the previous result, compared to the third quarter of 2011, which has decreased by 1.7%. Hungary's GDP decreased in 2013 by 0.9% and the performance of the Hungarian economy has decreased by 1.7%. Hungarian central bank has again lowered its key interest rate by 25 basis points in 2013 continuing easing the monetary policy to support the economy despite warnings the risk of inflation and weakening of forint. Lowering key rates by 25 basis points to 5.5% is in line with market expectations. The main interest rate of the Hungarian central bank thus reached the lowest values since November 2010. Additionally, since the beginning of the cycle of monetary policy easing, the leading Hungarian interest rate decreased altogether by 150 basis points (Central Bank of Hungary, 2016). Hungary is currently the most indebted V4 country, struggling with the recession, while slowing exports are playing against the country combined with its government's unorthodox method of governance reflected to the monetary policy of MNB governor flooding the market with cheap money.
Budapest Commodity and Stock Exchange (Budapesti Ertéktőzsde) was founded in 1864 and the real development began after an agreement in 1867. It was closed from summer 1931 to autumn 1932 because of economic crisis. After the World War II began the nationalization of large parts of the industry and BE has been dissolved and its assets were transferred to the state. Its activities were re-commenced after the year 1990, while an important milestone in its functioning was the year 2004 when Wiener Boerse and Oesterreichische Kontrollbank AG became the majority shareholders of BE. Budapest Stock Exchange has the following indexes: household Indexes - BUX, BUMIX and regional - CE-TOP20. As we can see in the graph, the development of the Hungarian BUX stock index has recorded since the beginning of 2008, a significant decline, while on the other hand in the following years 2010, 2011 and 2012 it did not record any major fluctuations (Budapest Stock Exchange, 2016).

Evaluation of the Development of the Capital Markets in the V4 Countries

Stock markets in the V4 countries have during the financial crisis essentially followed developments in major stock markets of the world. Any major drop in stock prices in the major markets and the value of enterprises had a similar course in the U.S. and Western Europe, while stock markets in the V4 countries follow this development in terms of penetration into the price depression as well as the timing of decline and subsequent recovery. The collapse of investment bank Lehman Brothers triggered the raids on world stock markets. In early 2008, the stock market values were reaching their highs and so was the case in equity markets in the V4 countries. Because of the low market capitalization, low trading volume and overall low liquidity of the stock market in Slovakia, we decided not to include the statistical characteristics of the Slovak share index SAX from the comparison. Our calculations were concluded from the data of the Trading Economics website using minimum and maximum WIG, PX, BUX index ratio, standard deviation, median and average values.
Polish stock index WIG reached its historic high 29.10.2007 at 3,917.87 points and in fact from the perspective of the analysis horizon in the period between the years 2008-2012, it has started the year 2008 at its peak at 3,456.05 points. The outbreak of the financial crisis has had a significant negative impact on the development on the stock index WIG. Share prices plummeted and the difference, between the maximum value of the stock index WIG from the beginning of 2008 and a minimum value of 1,327.64 during the year 2009, was nearly 62%. Statistical summary of the stock indices also shows that the stock index WIG reached from the period 2008-2012 the smallest volatility as measured by standard deviation of daily changes in index values.

Czech PX stock index reached its historic high also 29.10.2007 at 1,936.17 points and as well as in the case of the Polish stock index WIG started the year 2008 at its peak at 1,815.10 points. Also prices of Czech equities were hit by the outbreak of the financial crisis, when they fell to low from a peak in early 2008 of 628.50 points, thus by 65.4%. Volatility of PX stock index reached in the period between the years 2008-2012 1.86%, which means that the mean of the daily changes in stock index reached 1.86%. The difference between the minimum and maximum value of PX stock index reached the horizon through the analysis by 289%.
Hungarian BUX stock index reached its historic high 23.7.2007 at 30 118.12 points, as well as in the case of the Polish stock index WIG, the PX stock index began the year 2008 at its peak at 26 235.63 points. Prices of Hungarian equities were hit by the outbreak of the financial crisis, though from a peak in early 2008 they have fell to a minimum at 9 461.29 by 63.9%. The volatility of the Hungarian share index BUX achieved in the period between the years 2008-2012 the highest value among the compared markets at 1.97%, which means that the mean of the daily changes in stock index reached 1.97%. The difference between the minimum and maximum share index BUX reached the horizon through the analysis by 277%.

Conclusions and policy implications

The global economy is still slowly recovering from the aftershocks of the global financial crisis especially on capital markets. Internationalization, globalization and emerging of the various national financial markets in the global financial system create many elements of instability and within national economies increases susceptibility to financial shakes. Financial crisis has slowed down the growth performance of the V4 economies. It has transferred through the international trade links and financial intermediation into the V4 markets, particularly in the form of a real economy crisis and later on to the financial crisis, despite the fact that the Visegrad countries have applied many reforms. The highest statistical correlation from daily changes in the closing prices of equity have reached WIG and PX index at 68.4%. The lowest correlation have achieved stock index BUX and PX between themselves at 61.2%. Moreover,
BUX and WIG Indexes have reached negative correlation at -62.1% during the period of time between the years 2008-2012. From the perspective of the Czech and Slovak financial sector, the development after 2012 has been during the last three years mainly positive. The Hungarian economy fell deeper into recession and is slowly recovering. The reason for the deepening of the economic crisis was the decline in activity of the Hungarian industry and agriculture. The Polish economy according to available data strengthened and will further strengthen.

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References


The Determination of Company Value by Valuation Methods

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Abstract
The present conference paper deals with a corporate valuation in the Slovak Republic business environment. Theoretical background consists in identifying methods of valuation. In theory will be explained the reasons why the corporate value determining is important. A prerequisite is that the demand for business valuation is not extensive in Slovakia as much as in the developed economies. Potential reason is the absence of the Exchange and trading is therefore not as well developed as abroad. One of the key objectives of the article is to prove that even in the conditions of Slovak business environment, the company value determining in responsible manner is very important. Based on the value of the company they are able to choose effective bargaining and ensure efficient funding. The primary objective is to highlight the growing interest and therefore need to value of the company also in the Slovak business environment. The research part is based on a survey that organized consulting firm PwC in 2015 on a sample of 121 firms in Slovakia. Through the survey it is to highlight trends in mergers and acquisitions. The systematic processing of leaders visions is a key part of the work. Exceptional attention is devoted to the valuation of financial institutions. Financial institutions provide financial intermediation but they need to be also funded. There is assumed that the valuation for financial institutions is equally relevant. The article will be also focused on the possibilities of financial institutions valuation.. The research part consists largely of interpretation of the available research conducted in 2015 by consultancy firm PwC. During composing will be used synthesis, analysis and deduction in formulating conclusions.

Key words: Valuation, Acquisition, Fusion, EVA (Economic Value Added)

JEL Classification: G34 - Mergers, Acquisitions, Restructuring, Corporate Governance

Introduction
Every company needs to know its value. There are several reasons for that. First of all, relevant company valuation represents a basis for negotiation of funding terms. Usually the corporates are funded from own resources and consequently from external sources. At the point of approaching an investor it is important to present the fair value of the company. All rational thinking investors require adequate security of their investments and therefore the determination of the entity value, in which they intend to put their funds, is extremely important. The company valuation can be used as a basis for obtaining a bank loan because it gives view of the financial health of the company and suggests the prediction how the situation may evolve in the future. For this assumption it is inevitable to determine the value of a company in relation with strategic decision making such as a merger, acquisition or divestiture of certain organizational unit. Corporate valuation is necessary for strategic decision, because for responsible decision making is essential to have the most current information in appropriate quality. The purpose of corporate valuation is the prediction of potential impacts, possible risk prediction and thus ensure sustainability of strategic decisions. Determining the value of a company in a relevant way is not a simple process. Currently, there is a wide range of different methods how to present the value of the company. In addition, each company is specific and acts as a dynamic unit. Therefore, the corporate valuation is very complicated process with
many different variables. In developed economies, in which exist real stock exchanges, the information availability is significantly more sophisticated. Companies which are traded on stock exchanges have standardized reporting and elaborated various indicators and parameters in details. In this way they attempt to present their exclusivity and the ambition to be more attractive for potential investors. Corporate valuation requires large data source from internal and external business environment. Fully operational stock exchange mechanisms ensure sufficient volume and quality of information. It helps to determine the enterprise value in accurate and reliable manner. The Slovak Republic is a country where the developed stock exchange absents. Reporting is following the letter of the law and it is up to the trader himself whether and in which details are their internal reports prepared. Despite the absence of the stock exchange, the companies seek to standardized reporting, which significantly simplifies the valuation of the company does not matter which valuation method is used. The trend of company valuations by relevant method is on the rise also in conditions of the Slovak Republic, what is the key purpose of this research to prove. Interest in the fundamental valuation of the company is a manifestation of economic environment improvement.

The relevant subjects for the valuation in addition to standard business units are financial institutions. The reason is that also these entities generate profits. Financial institutions, particularly banks, provide financial intermediation between entities that have surplus funds and those who have a deficiency of available funds. Financial intermediation is the entrepreneurial model whose main mission is to generate profit for owners. Financial institutions own the prerequisite of elaborated reporting system, but on the other hand, the volume of financial transactions are significantly higher than in other entities. The process of determining the value of banking institutions is extremely difficult due to the complexity of operations. An important factor is the different asset structure, which is directly reflected in the different structure of key financial statements - balance sheet, income statement and in particular the statement of cash flow.

**Determine The Company's Value Through A Valuation Methods**

Valuation generally means assigning a certain value to the subject. Act No. 561/2004 Coll. Accounting, amending and supplementing Act No. 431/2002 Coll. on Accounting as amended by Act No. 562/2003 Coll. says valuation, or more correctly assessment (valuation of the English), is "the value, measured by the asset (in this case the enterprise) for a particular investor. Business valuation is expressed in monetary terms or the value of his property." (Act No. 561/2004 Coll., On Accounting amending and supplementing Act No. 431/2002 Coll., On Accounting as amended by Act No. 562/2003 Coll.). It is theoretically possible to valuate anything that surrounds us in the life, from pencil to large international corporations. Generally, the more complex system is the subject of the valuation, the more difficult is to determine its value. Basically, it is possible that a business owner decides that his firm has some value that is required for its purchase. However, it is questionable whether the second party will agree with the proposed price and if yes, in all likelihood such valuation will not reflect the fair value of the entity. "The aim of the valuation of the firm (the company) is determined by its market value (not market price) taking into account many factors affecting current and especially future economic situation." (OcenovanieFiriem. 2012. [online]. Bratislava. 2012. [quot. 2015.10.30]). The company valuation represents the monetary value of the company or its assets. The reasons why companies decide for the valuation of their assets are few. "Financial institutions tighten credit conditions, insurance companies are more focused on risk analysis and detection of insurance fraud, securities investment falls and of course the owners have chosen a more thorough management and become more prudent to news and information on their company" (VOCHOZKA M.: Metody komplexního hodocení podniku. Praha: Grada
Publishing, 2011. 9 p.). It should be emphasized that adequate valuation allows to create a realistic picture of the asset value of the company, its capital structure and financial results of its activities. Five most important reasons for which is corporate valuation carried out are as follows:

1. Reasons related to the transaction undertaking's intention: it is probably the most common and most obvious reason why management needs to assess the value of the company. External independent valuation consulting firms provide information for both buyer and seller. The buyer gives the signal, how high the price may be paid by the seller, on the contrary, determine at what lowest price, the company may sell. If we look at business activity in purely economic terms, then this argument is crucial for the company.

2. Legislative reasons: there are situations in which regulators require the valuation of the company. In this case, the valuation is enshrined in legislation and in the decree. Valuation is carried out for example for tax and accounting purposes. An example of this situation could be a merger, acquisition, or liquidation of the enterprise or conversion. The reasons, which do not have purely legislative nature, but even though can cause the need for valuation could be litigations.

3. Economic reasons: an example of economic valuation could be the valuation for creditors. Banks and investors need to know the value of the debt for their secure funding. Firstly, on the basis of return on their investments they decide whether to give money at all and, secondly, the pricing depends on the amount of the lien. Another very common reason for economic valuation is based on the needs of accounting. In the purchase price allocation (PPA Purchase Price allocation) is determined the fair market value, ie. fair value (Fair Market Value) of the purchased company.

4. Strategic reasons: corporate valuation results serve to the management as a basis for further decisions that may have strategic character. Based on the valuation, the company can, for example, decide to establish strategic alliances with other companies. An example of strategic decision may be a decision on the acquisition or merger. Mergers and acquisitions referred to the transactions involving targeted buying, selling and merging companies that originally acted alone. It's also the name of the department and aspects of corporate finance, management and corporate strategy. Economic Encyclopedia defines a merger as "the union of two companies into one new company, which occurs by combining the share capital with the prior consent of shareholders. A merger may also occur by exchanging new company on favorable terms their shares for shares of companies that cease to exist. In comparison with the absorption, the mergers are usually based on a voluntary agreement between shareholders and boards of the merging firms." (ŠÍBL, D. et al.: Veľká ekonomická encyklopédia. 2.rozšírené vyd. Bratislava: Sprint, 2002. 300 p.). The term acquisition can be defined as following. "The acquisition is generally referred to take over of one (weaker) company by the other (stronger) company. Ongoing usually buying a controlling shares of the target company (target) with a new owner, ie acquiring company (takeover)." (POLOUČEK, S.: Bankovnictví. 1st ed. Karvina: Silesian University in Opava, School of Business Administration in Karvina, 2005. 234 p.)

5. Internal reasons for the company and its owners: stem from the desire of owners and managers to know the value of the company.

Each corporate valuation business is a very complicated process. The difficulty arises from the fact, each entity is an individual subject and thus the valuation is also individual. The purpose of the company valuation is to fundamentally determine its market value, not market price. In
the valuation are taken many factors into account affecting the current and especially future economic situation of the company, industry and the economy as a whole. As is pointed out in the following picture, there are many methods of company and property valuation:

Figure 1: Corporate Valuation Methods

Business valuation methods can be classified into the following categories:

1. **The income approach methods**: the most frequently used method of company valuation. It is based on the assumption that investor is interested in the future income flows, or more precise the future cash flows (cash-flow). The most commonly used method is two-phase DCF (Discounted Cash Flow) method. DCF method is based on the financial plan of the company, which is ideally made for at least five years in advance. "*The quality of input information and its treatment influence the reliability of the results of the valuation.*" (DLUHOŠOVÁ, D.: *Finanční řízení a rozhodování podniku. 1.vyd.* Praha: EKOPRESS, 2006. 146 p.). The valuation is almost always provided to a specific point in the future, which is logical, as the investors are usually interested in the potential development of the company in the future. The value of the company is then calculated as the sum of the present values of cash flows (discounted cash flow by discount factor, which is usually the weighted average cost of capital WACC) in each year. Very similar but less frequently used model in this category is the dividend discount model (DDM), which calculates the sum of the present values of dividends paid to the shareholders. Instead of cash flow in the model act paid dividends. The requirements are that the company must take the form of a joint stock company and the regular dividends must be paid to its shareholders. It is also necessary to expect that during the valuation period the joint stock company will continue to pay regular dividends. Estimation of the amount of dividends may be easier than future cash flow calculation. It is especially easily predictable in case that the company prefers dividend policy with a constant increase of the dividend or policy with a constant dividend. In
The income approach valuation method is ranked also economic value added method (EVA - Economic Value Added). "The basic principle of economic value added is that it measures the economic gain. Economic gain in this concept a company makes when not only current costs are paid but also the costs of capital are paid, and it is different from accounting profit, including the cost of equity capital." (Jakubec M. - KARDOŠ, P. - Kublica, M.: Riadenie hodnoty podniku. Bratislava: IuraEdition, 2011. 62 p.). Economic value added is a quantity that can be used as a tool of financial analysis, management and valuation of the company. In essence, the EVA is a profitability indicator, which overcomes the shortcomings of indicators that were for this purpose commonly used. EVA provides a much closer connection to shareholder value. In addition to above mentioned it allows to utilize the maximum of information available from the accounting system of the company. The fundamental principle of economic value added is that it measures the economic gain. According to the EVA indicator company achieves economic profit not only when the common costs are paid but also the costs of capital; thus differentiates itself from the accounting profit. EVA indicator is perceived as net income from operations, reduced by the cost of capital. The formula for calculation is as follows:

\[
\text{EVA} = \text{NOPAT} - \text{EC} \times \text{WACC}
\]

NOPAT (Net Operating Profit After Taxes) - profit from operations of the enterprise after tax

EC (Employed Capital) - capital bound in assets, which is used for operational activities of the company

WACC (Weighted Average Cost of Capital) - weighted average cost of capital.

2. **The comparative approach** is a corporate valuation method based on a comparison with other company, which was recently sold and has the same or very similar asset and capital structure. The valuated company is used as a benchmark. The disadvantage is that it is very difficult to determine whether the two companies are comparable for valuation purposes. "According to international standards for valuation in the process of companies valuation apply the three principles of determining value; one of the principles is" the principle of price comparison". According to this principle, the valuated company is compared with similar companies, with property rights or securities that have been sold on the open market. Comparable companies should operate in the same sector of the economy as the undertaking and should respond to the same economic variables. Typical data sources are, for example, acquisition market in which the entire companies are traded, previous transactions relating to the ownership of the company and the markets for publicly traded companies, in which ownership shares of similar companies are traded." (HARUMOVÁ, A. – DŽUPINKA, M.: Stanovenie hodnoty majetku 1. vydanie. Bratislava: IuraEdition, 2009. 304 p.). The method requires a large amount of data and comparable components, which presupposes a developed market economy. A key source of data are the stock exchange, data from similar transactions and other. I therefore consider that in the Slovak capital market, this method is not feasible.

3. **Asset valuation method** derived the company value from the total value of assets that the company creates. The advantage of this method is that it is based on independent valuation of assets by audit procedures that take into account adjustments (provisions) and valuation of liabilities. "The valuation in accounting is the process in which the individual values of economic resources (assets and liabilities) are assigned a certain price in monetary terms. The usability of accounting information is essentially
dependent on the valuation method used for booking the individual economic transactions, and particularly on the reporting method in, however, since the valuation of items reported in the accounting closing. The basic problem is the problem of financial accounting for assets and liabilities of the company and simultaneously of expenses and revenue." (JANHUBA, M. a kol.: Teória účtovníctva 1. vydanie. Bratislava: IuraEdition, 2012. 36 p.).

As was mentioned earlier, valuate company and determine its adequate value is not a simple process. Difficulty stems primarily from the complexity of the process. "The determination of the market value of the company represents in practice a complex issue because each business is unique unit which cannot be compared with other companies. Synergistic effect also causes the value of the company is typically greater than the sum of the individual parts of its property. In the corporate valuation process as a whole, it is necessary to consider not only the real value of assets but also its revenue potential and possibility of further development of the company, which largely influences the subjective factor” (KOTULIČ, R.: Zborník vedeckých prác katedry ekonomie a ekonomiky ANNO 2010. Prešov: Fakulta manažmentu prešovskej univerzity v Prešove, 2010. 80 p.).

Basic problems in business valuation are as follows:

1. Each business is specific, whether its ownership structure, business, industry exposure and many other factors. There is therefore no public offer and demand, which would have objectified price on the market. It is not even possible to set up uniform procedure for determining the value of a company, which would be applicable in every single business entity.

2. The value of the company is typically greater than the sum of the values of its components. Otherwise it would be very easy to determine the value of the company. In determining the value it is necessary to establish the company's potential for the future. In the valuations the future is one of the key factors, thus determining a number of trends, both in the labor market and the consumer market and macroeconomic situation of the whole region or country. For example, the labor force is one of the most important components of the company and the quality of management influences future development of the company. This means that in the calculation does not take into account only the current value, but especially the return potential and market position in the future.

3. Another factor that makes the assessment of the company value difficult process is the subjectivity of the person who makes the valuation. In case that the company does an analysis from internal resources, it is likely that the analysis will be influenced by the experience of employees as well as by personal interest in the future. It is expected that employees have an interest in positive company valuation and thus the perspective good employment situation in the future. This effect is stronger in case of management, which is attempting to maintain and possibly expand its power within the corporation. The risk is also in the case of determining the intrinsic value of the company by external consultancy. First of all, an external firm may not have enough experience in the sector and trends identification or predictions might be a problem. In addition, the external consultants are people who can be also the customers of the company which is the subject of valuation. Their personal intrinsic value, which stems from their personal experience may be reflected in the determination of the key trends for the process of determining the value of the company.
Aim of The Paper And Hypotheses

The aim of this paper is to document the need for corporate valuation in the business environment of the Slovak Republic. In today's dynamic environment it is difficult to determine the value of the company in a relevant way. There are quite a wide range of methods by which companies can determine their value. First, it is essential to realize the importance of the valuation. Companies need to know their value, for example, for merger or for approaching the investor. It is also important to know the corporate value during strategic decision making. Based on the knowledge of the value of the company, management is able to select an effective negotiating position and then effectively work towards the goal. For this reason, this publication aims to both highlight the importance of valuation, but also describes the basic company valuation methods. It is the aim of the paper to formulate the trends in mergers and acquisitions of companies, based on a survey organized by PwC company on a sample of 121 firms in Slovakia in 2015. Assumption is the hypothesis that with the increasing demand for mergers, acquisitions and strategic alliances increases also demand for fundamental thinking about the economic situation of the company. The logical assumption is consequent increasing demand for determining the entity value in fundamental way. Partial aim is to assess the possibility of valuation of the financial institutions, because these institutions are also motivated to generate profits. From this point of view I assume that the financial institutions are relevant entities to determine their value. Financial institutions, specifically banking institutions, are entities that provide financial mediation. Motive of the a banks activities is to make profits for the owners of the bank. In addition, the banks are also the subject to the economic process as merger, separation units, merger, acquisition, or forming partnerships and strategic alliances. On that basis, there is an assumption that banks need to know their value as well as other businesses. Valuation of banks is difficult, because of a large volume of financial transactions as well as the specific structure of the financial statements, particularly the statement of cash flows.

Methodology And Methods of Research

During writing this paper were used of multiple methods. In the initial phase of compilation work it was necessary to accumulate the necessary information and relevant literature to the topic. Subsequently it was performed the synthesis and comparison of the accumulated information. Based on the analysis of gained information it was come to the certain conclusions. The paper largely consists of the interpretation of the available research conducted in 2015 by consulting firm PricewaterhouseCoopers (PwC). In the part about possibilities of valuation for financial institutions were used the available sources of information and their subsequent synthesis. In the conference paper are used synthesis of knowledge, analysis and deduction the available resources and conclusions formulation.

Corporate Valuation in The Business Environment of Slovak Republic

In the Slovak Republic is not a business valuation as common as in the developed economies of Western Europe. It is possible to identify several reasons why this is so. First of all, as already mentioned, there is no standardized stock exchange in Slovakia as it is in the developed countries. This means that access to information is largely limited and companies disclose only data required by the Slovak Republic legislative. Another reason is that the investor does not always require a fundamental valuation of the company. In the loan providing or investor approaching it is necessary to persuade the investor that his investment will be profitable within a certain timeframe. In currently lingering economic crisis, investors are still not willing to invest in buying new companies, acquisitions or mergers. According to Slovak CEO Survey 2015 organised by consulting firm PwC and Forbes magazine conducted on a sample of 121
CEO in Slovakia, 80% CEO expect its sales will be next year (2016) to grow. Such positive expectations impact very positively on the healthy growth of companies and their valuation in the future. The survey also points out that 9% of respondents considered mergers and acquisitions as the most important opportunity for the growth of their companies in the next 12 months, while the percentage in comparison with 2014 (4%) increased by more than half. Another 7% expect the most significant opportunity of creation the new joint ventures and strategic alliances, with the preceding year such expectations shared by only 2% of respondents. These figures from the survey show that the CEOs in Slovakia see the opportunity in strategic alliances and mergers for its future growth. This means that there is a high probability that in the future will increase interest in acquisitions, mergers and strategic alliances, which in other words means that the companies will be needed to valuate. From this reason I conclude that even in the Slovak Republic will increase in the future interest in company valuation in more fundamental ways. The survey subsequently focused on the fields in which the CEOs in Slovakia plan to invest in the next 12 months. An interesting finding is that 20% of respondents actually plan to invest money into new mergers, acquisitions, joint ventures and strategic alliances. This reveals that firms do not only see the potential in mergers and strategic alliances, but they are also willing to invest in this area.

As mentioned earlier, according to Slovak CEO Survey 2015 organised by consulting firm PwC and Forbes magazine conducted on a sample of 121 CEO in Slovakia, Slovak companies see perspective in concluding strategic partnerships to ensure success in the future. The most important reason for cooperation find access to new customers and access to new or emerging technologies are up to second place. The third most important reason is given as the reason for the ability to strengthen brand name or reputation. The survey further reveals that the companies plan the minutiae part of its activities focus on closer cooperation with suppliers, which is in my opinion a rational decision. The companies thus can create more efficient logistics structure, which can be reflected not only in lower costs, but it is also possible to satisfy customer needs more effectively. According to the survey, 59% of surveyed respondents the space for innovation and improvement processes represent joint ventures, strategic alliances or just informal cooperation with suppliers (on this question the company had the chance to choose a maximum of three subjects for cooperation). The percentage is high, but compared to a similar survey conducted in the same period on the global level, it is still the lower figure, since almost 69% of surveyed firms around the world see potential for improvement through better relationships with suppliers. At the level of the business environment in Slovakia, the second most attractive area for the creation of strategic partnerships with academia, as 55% of surveyed companies responded that they see a solution in cooperation with academia. Comanie are so planning to build support for their own research and development and skilled labor for their purposes. The third biggest group represent the customers (53% of respondents). I would point out one specific subject - state. Only 20% of surveyed respondents answered that the state as an entity with whom intend to enter into a strategic partnership. It indicates that companies do not see the state and its possible support as substantial benefit. The overall position of the state as a potential candidates for the strategic partnerships, it finished at eighth place and ahead of him are, for example, start-ups, which prefers 35% of respondents.

The survey revealed that “in the case of new industries penetration Slovak enterprises are more conservative. At the question whether the company started in the past three years to do business in a new industry or at least considered this cooperation responded negatively 53% of the total 121 enterprises operating in the Slovak Republic.” (PwC. 2015. [online]. Bratislava., 2015. [cit.2015.7.30]). Another 19% of respondents have not penetrated the new industry in the past three years, but at least thought over this variant and 28% of respondents became operational in new sectors. The survey thus shows that the Slovak business community is
interested in creating strategic alliances, but rather in reliable areas where used to work until now. The primary companies goal is to acquire new customers for its products. I deduce that the companies start to focus on new business sectors when their current markets are saturated. For the purposes of corporate valuation, however, the purpose of valuation is irrelevant. It is irrelevant whether the valuation is executed for the creating new strategic partnerships with companies in the industry or business which is outside of established industry. Overall, it can be concluded that since companies have increasing interest in new partnerships, it is highly probable that it will increase the interest of business valuation.

Financial sector, particularly banks have in corporate valuation a specific position. Most enterprises implement valuation to convince banking institutions that are credible for credit. This implicates that banks are mostly those entities that assess the value of other holdings. This does not mean that banks do not need to know its own value. Especially in the case of large international banks it is extremely difficult to determine its value. The bank is in terms of the Commercial Code a company like any other. Thus, its main motive is to make profits for their own name and bearing risk. As a financial institutions are specific, it is necessary to follow the specific criteria applicable to financial intermediation. Also in the case of the bank it is possible to calculate the cash flow and thus determine the value. The reasons why the bank needs the valuation are several. In the first place the bank itself is forced to acquire foreign resources (fundings), not only from their clients but also from other banks, which must ensure that it is sufficiently trustworthy. Moreover, the bank needs to convince their clients to put in the bank deposits. Because of sustainability the banking institutions are subject to economic processes such as mergers, acquisitions, the creation of strategic partnerships and alliances, and separation of the branch. All these processes are part of the strategic decisions. In strategic deciding, it is essential that the decision-making body possesses the most accurate information. One of the most important information are value of the bank and potential impact of strategic decisions. Moreover, the entire banking system is subject to strict criteria for all financial (especially banking) institutions.

The assumption is that financial institutions are specific business entities and there are several reasons behind. The first reason is that the financial institutions are subject to banking supervision (in particular the Basel Banking Committee on Banking Supervision, which provides, inter alia, capital adequacy requirements). Specificity of financial institutions stems from different asset structure of the balance sheet and varies also the income statement compared with non-financial entities. As for the standard enterprise represents debt and is displayed on the balance sheet on the liabilities side, bank records the same economic situation as their property and places it in the balance sheet as an asset.

Even more significant impact is in the case of the statement of cash flows. Cash flow is a key variable in income approach models, particularly for DCF (Discounted Cash Flow) model in which the corporate value is calculated as the sum of the present values of cash flows in each year. An alternative to cash flow is the amount of dividends paid to shareholders. Diversity of financial statements is the primary reason why the valuation of banking institutions is non-standard and requires a specific approach. Another reason is that financial institutions act as financial intermediaries between entities that have surplus funds and those who have a deficiency of funds. Financial institutions represent so, unlike other entities, other options within the context of investment products- intermediation. The following figure summarizes perspectives on investment products for financial institutions.
Figure 2: The Role of Financial Institutions in Investments Products

Source: own prepared

Based on the above picture financial institutions perform the creditor, debtor and mediator role related in investment products. This unique position makes the financial institutions specific entity whose valuation is very much challenging.

Results

The primary objective of the research was to compile information about the company valuation in the Slovak Republic. Consequently the different valuation methods are described. The focus is on the formulation of the reasons for the valuation and an indication of weaknesses or risks associated with the measurement. The benefit of this publication is emphasis the importance of corporate valuation. Company valuation in the Slovak Republic is not as usual as in the more advanced economies of the world. The reason is little standardization of reporting, which would significantly contribute as a source of relevant information. Above mentioned reason is closely linked to the absence of exchange in the economic environment of the Slovak Republic. Entrepreneurs did not have enough motivation to valuing, since they were not listed in the exchange. A significant factor is the complexity of the process of valuation. Providing valuation by internal sources is inefficient since the typical organization does not specialize in valuation. It is therefore much more efficient to use the services of experienced consulting company for this purpose. Another reason why company valuation is not a routine in Slovakia is the financial cost of detailed analysis during corporate valuation. Usually only strongly established and financially stable businesses are economically strong enough to pay for fundamental corporate valuation.

Based on the analysis of survey that has been organized by firm PwC to sample 121 Slovak companies in 2015, I came to the conclusion that in the future it is probable to expect an increasing interest in professional valuation of the companies by renowned consultant companies in the field of finance. I concluded this affirmation based on analysis of trends recorded in survey. The survey clearly shows that companies realise the importance of strategic alliances and mergers as key factor for strategic and sustainable decisions especially in increasing competitive environment. This trends logically follow the need for company valuation and their organizational units. Since the valuation process is pretty much difficult, it is highly likely that the company will request the specialized companies. A fundamental corporate valuation requires assessment of large amounts of data and information not only from internal but also from
external firm environment. Based on observation it can be stated that corporate reporting in the Slovak Republik is also becoming more elaborate, detailed and complex at the same time. This conclusion can be implicated based on higher interest in various forms of investment plans. Since the entrepreneurs are also planning to focus on the strategic decisions in the future, the logical conclusion is that they will need relevant and accurate information. Relevant information in the required quality requires established and standardized reporting in the absence of a stock exchange. The continuing trend of strategic decision stems from the need of enterprises to create a sustainable position in the dynamic environment of turbulent changes.

The paper also refers to the possibility and also the importance of the valuation of financial institutions. Financial institutions are specific entities that act as financial intermediaries. They are usually treated as an entity for which conventional companies prepare valuation in order to obtain financial resources. However, ultimately, the financial institutions are also the entities that are motivated to generate profit. They are also the subjects of the merger and creating strategic alliances. As the property structure and the structure of financial sources of assets in financial institutions are different, the approach to valuation is different as well. However, despite the conclusion that the financial (banking) institutions are very difficult to value, they all necessary criteria for corporate valuation. First they are profit generating entities. They are also the subjects of economic process as all other companies and they make also strategic decisions. Banking institutions generate cash flows and distribute the profit to the shareholders in the form of dividends. They are therefore suitable candidates for use fundamental valuation models that are based on a income basis. On the other hand, it should be emphasize that the valuation of banking institutions is difficult. The difficulty of determining the value of the bank stems from the above-mentioned different structure of financial statements and the high volume of financial transactions.

Conclusion

The corporate valuation is the current trend is stable and strong businesses. There are several reasons for determining the value of the company. In general it is possible to say that every company needs to know its worth especially when the company stands in front of a strategic decision. If the management intends to reach a responsible decision it is necessary to know the value of the company and use the suitable valuation model. Interested in learning about the value of the enterprise are external entities, especially banks and investors. The need for valuation in the Slovak Republic is not as apparent as in the countries with functional stock exchange. The absence of exchange is an obstacle in the way of harmonization and uniform reporting requirements. Inspite of that, the wualified consulting companies in Slovakia marked an increasing trend in the interest of the management for business valuation. The reason is that the corporate planing wich takes into account mergers, acquisitions, or even new markets penetration. Survey held by consultancy firm PwC shows that companies follow the trend of new business opportunities through strategic alliances, partnerships or mergers. The logical conclusion is that such strategic decisions need holistic approach which takes into account the relevant company valuation. Despite the absence of exchange, interest in Slovak entrepreneurs to invest and especially of rational investment is increasing. It is therefore evident how important the company valuation becomes. Entrepreneurs which are suitable for determining the value are all the entities generating profit. From this assumption it is understandable that the corporate valuation may also be provided for financial institutions such as banks. Banks are therefore relevant subjects to valuation, even it is important to know the value and financial health of financial institutions because they ensure financial intermediation. Banks are very specific entities, since the structure of the financial statements of banks is vastly different from the financial statements of other profit generating entities. Because of above mentioned and
also because of the high volume of financial transactions it is extremely difficult to evaluate the financial institution in relevant and fundamental manner.

References


Women on boards of top companies in Slovakia: Still under the glass ceiling?

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Abstract
The aim of this paper is to (1) analyse the representation of women in the highest decision-making bodies of companies in Slovakia, (2) to assess the impact of selected factors on the level of this representation and (3) to compare the analysis results with the conclusions of similar studies conducted in the broader international context. The paper contributes to the theoretical and empirical knowledge on the issue of women’s representation in decision-making positions expanding it with the currently missing empirical data from Slovakia. The paper works with the dataset including the information about companies listed in the Trend Top Ranking of 200 largest non-financial companies in Slovakia. State owned companies included in the TIS ranking are added to the dataset for the purpose of assessing the impact of the public sector ownership on the representation of women in the companies’ decision making bodies. The results of analysis show the strong persistence of the “glass ceiling” phenomenon in the Slovak business sector. Only 5% of companies in the TREND TOP 200 ranking had a women in the highest executive position. Women accounted for only 7.17% of members of boards of directors and 15.5% of members of supervisory boards. The paper further investigates how is the level of representation impacted by (1) sectoral affiliation the company (public vs. private), (2) character of the industry and the proportion of women in it (the degree of horizontal gender segregation of given industry) and (3) the geographic origin the majority owner. The last part of the paper suggests areas of further research related to the role of women in decision-making in Slovakia, particularly focusing on the relationship between the proportion of women in decision-making and economic performance of firms in Slovakia.

Keywords: decision making bodies, executives, women in decision making, representation of women, gender equality

JEL Classification: M12, J16, M51

Introduction
Even though corporate boards are not “men-only territory” anymore representation of women in the top executive positions is still far from desired level that would ensure their equal participation in governance and decision making processes. Gender equality in corporate boards therefore remains in the focus of both public and academic attention. Introduction of quotas in Norway in 2006, subsequent proposal of European Commission to make the similar measure legally binding across the whole European Union and economic and financial crisis, posing the question whether the things would go different if more women would be on corporate boards, further encouraged the research interest in this topic. However empirical evidence from eastern and central Europe is still lacking. This paper therefore aims to contribute to the theoretical and empirical knowledge on the issue of women’s representation in economic decision making expanding it with the currently missing empirical data from Slovakia.

Extensive body of the theoretical and empirical research this paper hopes to contribute to can be divided into two wide groups. Majority of studies analyses and explains factors that influence the level of representation of women on corporate boards, dealing with both aspects that hinder their participation and those that can potentially increase it. The second, less extensive but
growing group of studies, analyses the impact that representation of women on boards has on different aspects of firms’ performance (e.g., financial, reputational or social performance). Research, focusing on determinants of women representation in top positions deals with the variety of factors on individual (microlevel), organisational (mesolevel) and broader, societal and cultural level (macrolevel).

Mainly the demographics and characteristics of women leaders are explored on the individual level. Evidence from several countries shows that women entering the boards do not lack the necessary human capital; on the contrary they often have better qualifications, more international experience or higher academic achievements than their male counterparts. Despite that they remain underrepresented in decision making and even when they reach the top levels they often hold less powerful positions, earn less than men or are confronted with the “glass cliff” phenomenon (Terjesen, Sealy, and Singh 2009; Szapuová et al. 2013)

On the mesolevel, the effect of specific characteristics of organizations and industries on the women’s representation is analysed. Besides the organisational cultures mainly the effects of different organisational size and structures are explored. Studies report correlations between a firm’s size, by revenue or market capitalization, and the number of female board members contradicting the myth that it is easier for women to succeed in smaller companies (Terjesen, Sealy, and Singh 2009). Size of the board may also have an influence on the number of female top executives: the larger the board, the greater the number of female directors (Nekhili and Gatfaoui 2013). The presence of women in decision making however does not automatically mean more gender equality: the critical mass of 30% representation is necessary in order to achieve the organisational change (Kanter 1977; Dahlerup 1988; Broome, Conley, and Krawiec 2010). Correlations between particular industry sectors and an increased number of female board members is also analysed, focusing on both industries with high share of female employment such as e.g., retail, finance, media, banking, and health care and male dominated industries such as transport or energy (see e. g. Isidro and Sobral 2015; Carlsson-Kanyama, Juliá, and Röhr 2010; Mateos de Cabo, Gimeno, and Nieto 2009). Especially in the Anglo-Saxon countries the attention is also paid to the position of women in public sector organisations and the role this sector has in acting as a good practice laboratory.

On the macrolevel, effect of cultural, economic and political environment is analysed. Some studies focus on impact of broader cultural and social institutions, such as values and norms while other deal with the effects of socioeconomic factors or correlate the level of women’s representation to the specific policy and legal framework. E. g. Chizema, Kamuriwo, and Shinozawa (2015) come to the conclusion that strong representation of women in political decision making has a positive impact on the prevalence of women on corporate boards and degree of religiosity in a society relates negatively to the representation of women in the economic decision making. As the number of countries introducing targeted public policies to increase share of women in decision making is increasing, so does the number of studies that evaluate their outcomes. The studies analysing the effect of quotas in France, Spain and Norway mostly report cautiously optimistic results (Singh, Point, and Moulin 2015; Hoel 2009; Wang and Kelan 2013). Empirical results indicate that the gender quotas result not only in the higher representation of women on boards but lead also to higher number of female directors and provide a fertile ground for women to take top leadership positions (Wang and Kelan 2013). The effect of macro level factors is crucial for understanding the position of women in postsocialist countries such as Slovakia bringing the legacy of statist gender equality model that combined adult worker expectations with strongly segregated gender labour division in private life. Subsequent political and economic changes resulted in re-familiarisation of childcare (moving the childcare from institutional care facilities to families) and contributed to the
difficult position of women in the labour market (Mrčela, Lužar, and Šmuc 2012; Pawera and Štefancová 2014).

Methodology
The paper is based on the descriptive analysis carried out with an aim to explore the level of representation of women in the highest management bodies of companies in Slovakia and assess the impact of selected factors on the level of this representation. The analysis was carried out on the sample of 200 companies included in the Trend top 2015 list including 200 largest nonfinancial companies according to the volume of sales for the previous financial year (Trend 2015). Data on the members of boards and decision making bodies and data on the legal form of the companies were obtained from Business Register of Slovakia (Ministry of Justice of the SR 2016). All types of companies were included in the analysis. In case of limited liability companies Business register was also used to obtain data on the geographic origin of the ownership of companies. Data on two types of corporate bodies were collected: in case of all companies data on composition of statutory bodies (depending on the type of the company board of directors or managing director) were obtained and in case of 93 companies’ data on the composition of supervisory boards were collected. Additional desktop research was carried out to identify the ownership background of joint-stock companies (annual reports). In order to compare the representation of women in private and public sector companies, data on 80 firms from the Transparency International public companies list were also included in the analysis (Transparency International 2015). Collected data were clustered according to several criteria and share of women was calculated for the individual data clusters.

Results and discussion
Corporate bodies of companies included in TREND Top 2015 list comprised of 996 members in 2015. Out of these only 106 were women (11%). Average number of members for single organization was 4.97, out of this only 0.53 were women. Not a single woman was represented in corporate bodies in case of 136 companies and only 10 of analysed companies had female representatives in both statutory and supervisory bodies. The “critical mass” of 30% representation of women was reached in case of 21 companies. The following figure displays the distribution of companies according to the level of representation of women (expressed as a share of women on the total number of body members) in their corporate bodies.

<table>
<thead>
<tr>
<th>Share of women (%)</th>
<th>Number of companies with respective share of women in statutory bodies</th>
<th>Number of companies with respective share of women in supervisory bodies</th>
<th>Number of companies with respective share of women in management bodies (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>No women</td>
<td>167</td>
<td>84%</td>
<td>52</td>
</tr>
<tr>
<td>Less than 5%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>5-15%</td>
<td>4</td>
<td>2%</td>
<td>3</td>
</tr>
<tr>
<td>16-20%</td>
<td>6</td>
<td>3%</td>
<td>6</td>
</tr>
<tr>
<td>21-25%</td>
<td>2</td>
<td>1%</td>
<td>5</td>
</tr>
<tr>
<td>26-30%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>More than 30%</td>
<td>21</td>
<td>11%</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
<td>93</td>
</tr>
</tbody>
</table>

Source: by authors, based on data from Trend (2015)
The share of women in corporate bodies of the companies in the analysed sample is considerably lower than the share reported by the European Commission for the largest publicly listed companies in Slovakia (Ministry of Labour and Social Affairs 2015) that reached 20%, compared to the average of 5% for the whole EU. However, only ten companies from Slovakia are currently included in the EC database used to calculate this indicator (European Commission 2016). Representation of women in corporate bodies of analyzed companies (with the few exemptions all of them are private companies) is also lower compared to the state owned companies with 13.3 % of women in on their management boards (15.5% for supervisory bodies and 11% for statutory bodies).

Total share of women in corporate bodies was higher for the joint-stock companies than for the limited liability companies. Higher share of women in joint stock companies is mainly related to the fact that women tend to be more represented in supervisory than statutory bodies and majority of limited liability companies do not have any supervisory body. On the other hand, share of women in statutory bodies is higher for limited liability companies. The following table displays the share of women in corporate bodies of companies split according to their legal form.

<table>
<thead>
<tr>
<th>Legal form</th>
<th>Frequency</th>
<th>Number of companies with at least 1 woman on Boards (Count/%)</th>
<th>Share of women in statutory bodies</th>
<th>Share of women in supervisory bodies</th>
<th>Share of women in management bodies (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited liability company</td>
<td>120</td>
<td>21/12%</td>
<td>9%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Joint-stock company</td>
<td>76</td>
<td>43/22%</td>
<td>6%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>General partnership</td>
<td>2</td>
<td>0/0%</td>
<td>0%</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>State-(owned) enterprise</td>
<td>1</td>
<td>0/0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Cooperative</td>
<td>1</td>
<td>0/0%</td>
<td>0%</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>64/34%</td>
<td>7.17%</td>
<td>15.69%</td>
<td>10.66%</td>
</tr>
</tbody>
</table>

Source: by authors, based on data from Trend (2015)

The higher share of women was not related to the higher number of board members. The share of women was the highest for the organization with 4 and 5 members of corporate bodies, where it reached 9.7%. It was only 5.62% for the companies having more than 6 members of corporate bodies, 4.53% for companies with two members and only 3.82% in case of organization where there was a single person with the top executive role.

With regard to the sectorial distribution, the companies from the sector of “wholesale and retail trade and repair of motor vehicles and motorcycles” (26,27% of women in the management bodies for the sample of 50 companies belonging to the sector) achieved the highest share of women’s representation, mainly due to the high share of women in their supervisory bodies. However since majority of companies belonged to two very broadly defined sectors (“manufacturing” and “wholesale…”), further sub-classification would be needed to obtain more refined results enabling to analyse the possible relationship between the horizontal gender segregation and female representation in the decision making bodies of companies in particular sectors and no generalisation is possible based on the existing sample.
In order to find out whether foreign ownership has some impact on the level of women representation analysed companies were divided into the clusters based on the geographic origin of the their owners or parent company. Level of representation of women in companies with Slovak ownership background was close to the average values (11.74% of women in the management bodies for the sample of 40 companies). The share was 12.55% for companies from the region of Central Europe (sample of 54 companies from Austria, Germany, Switzerland and Italy) and 10.06% for the companies from the region of Western Europe (sample of 38 companies from France, Finland, Luxembourg, Netherlands, Norway, Spain, Sweden and UK). The most striking result was the absence of women in the corporate bodies of companies coming from Southeast Asia (not a single women for the sample of 20 companies from South Korea, China, Taiwan and Japan.). The number of companies from other regions was too small to draw any conclusions or generalisations on the share of women in their management bodies.

Conclusion

The Female FTSE board project announced important news in their report for 2015: all-male boards have totally disappeared from the FTSE 100 companies (Vinnicombe et al. 2015). As this paper showed, in the same year the glass ceiling was persisting in Slovakia and corporate boards and top leadership positions remained unattainable for women in majority of the largest companies in Slovakia. The paper provided an initial descriptive picture of the female representation in Slovak business environment and pointed out several issues that could and should be further explored. The further quantitative analysis assessing the effect of multiple factors on the female representation on boards is necessary. This could be followed be the analysis of relationship between the proportion of women in decision-making and economic performance of firms in Slovakia. Besides, analysing women’s representation in particular industries or exploring how interactions between foreign organisational cultures and Slovak business environment influence participation of women on boards might be particularly interesting.

References


Intrastat and its application in business environment

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Abstract
The European Union is an institutional expression of the integration of the member countries into the Community, whose primary goal was and remains to ensure a peaceful cooperation of the member states. It is built on common principles and values. Slovakia is one of the member states since May 1, 2004. For our country, this meant many changes and modifications in legislation. The European Union provides free movement of goods and services, capital and persons, in which citizens have the right to live, work, study and do business. The topic of this paper is the movement of goods between EU member states, which is subject to INTRASTAT reporting. The first part defines the basic concepts of the research problems, the legislative framework in the European Union and the Slovak Republic, which is subject to the Intrastat system. In the second part, we define the relevant paragraphs of messages that are completed when delivering or shipping goods. The third part deals with corrected reports. The fourth part is practical – one example of a construction company, we complete the INTRASTAT - SK report regarding delivery.

Key words: intrastast, legislation, tariff

JEL classification: C820

Introduction
Intrastat is a known expression especially for entrepreneurs trading with EU Member States (hereinafter referred to as "EU"). The Slovak Republic became an official member of EU on 1 May 2004 along with nine other countries. One result of EU-membership was the abolishment of previously existing duties. However, it was necessary to establish a single administrative tool, which would record the movement of goods imported and exported from Slovakia.

Definition of terms
Intrastat was introduced in the Member States on 1st January 1993. Its aim was to create a system for collecting statistical data related to the movement of tangible assets between EU Member States and for monitoring macroeconomic indicators, among which we also include foreign trade. Thus, this system is not following the movements of financial and intangible assets and services. As Slovakia became a member of EU, it was necessary to create the same statistical system to monitor the movement of goods and data, which would serve not only for business but also for the monitoring of foreign trade as one of the main macroeconomic indicators affecting the country's economic policy. These data are further provided to other international organizations such as the World Trade Organization (WTO) and United Nations
(UN). In addition, beside Intrastat there is also Extrastat, which was set up to monitor the movement of goods between EU Member States and third countries.

The Slovak Government, by its Decree no. 1001 of 4 September 2002 approved to prepare INTRASTAT-SK in collaboration with the Statistical Office and the customs section of the Financial Administration of the Slovak Republic. In accordance with Act. 540/2001 Coll as amended, the Statistical Office of the Slovak Republic carries out activities related to the tasks of the program of state statistical surveys. Part of this program is also the data collection for INTRASTAT-SK, which covers the methodology for managing the entire data management process, publishing statistical data, provision of guidance to providers of statistical information (hereafter “PSI”) submitting reports and more. Financial Administration - section Customs is responsible for the collection and the initial check of documents for INTRASTAT-SK and related activities as guidance in completing the form, classification of goods, and more.

(Financial Administration of the Slovak Republic, 2015)

PSI is any legal and physical person and groups registered for VAT in the Slovak Republic, which for the previous calendar year, or from the beginning of the reporting period, received or sent goods among EU-states in aggregate value in excess of the exemption thresholds. According to Act no. 540/2001 Coll., PSI is anyone who receives requests to provide statistical information. PSI which during the previous year or from the beginning of the reporting period, received or sent goods exceeding the exemption threshold values, are required to submit an Intrastat declaration. The exemption threshold valid for the year 2014 was 200 000 EUR for received goods and 400 000 EUR for dispatched goods. Legal entities and natural persons, who are not obliged to submit the returns, are exempted from providing any Intrastat declaration.

On the other hand, the public institutions, public authorities, local authorities, who are obliged to register for VAT and exceeded the exemption threshold are required to submit an INTRASTAT declaration. (SO SR, 2015)

A reporting entity is required to submit an Intrastat declaration from the month in which it exceeded the exemption threshold, including that month. In cases, where the obligation arose in the previous calendar year, PSI shall be obliged to submit the report in the following year. In the case a PSI found out that it exceeded the threshold for an exemption, it is obliged to inform the Statistical Office not later than within 10 days, either by email, fax or mail with a questionnaire. The questionnaire is available on the website of the Statistical Office in the section registration. Subsequently, the provider of statistical information receives from the Authority: the username and password, as well as an information about the office, who will oversee the accuracy of the data in the Intrastat declaration. (SO SR, 2015)

If the provider of statistical information was not required to submit declarations during the previous year for the following year, this obligation shall cease to exist, and PSI may seek the abolition of duty from 1 January. If the significant factors that have resulted in the abolition of reporting obligations occurred, PSI shall seek the abolition of the reporting obligation. (Liquidation, bankruptcy, dissolution). (ŠU SR, 2015)
A PSI is required to send the report in electronic form within 15 calendar days after the end of the reference period. In case the 15th day falls on stately recognized holidays and non-working days or a Saturday or Sunday, it shall be postponed until the next business day. The reference period may be a calendar month, in which the tax obligation arose or the calendar month, in which the goods were physically received or sent. The reference period is the calendar month in which the tax obligation arose (even if the provider of statistical information is a quarterly VAT payer) or when the goods were physically received from a Member State or dispatched to a Member State. The reference period is also the calendar month, in which the goods were physically received or delivered and applies to all other business operations, which did not arise through the receipt of goods in the country of a Member State or dispatch of the goods to another Member State under the VAT law, and even in that case the PSI is a quarterly VAT payer. PSI may submit several part-declarations during the month. Basically, the PSI is obliged to send a declaration; but if there was no transaction in that month, it must submit a “Zero declaration” (SO SR, 2015).

General Information
INTRASTAT-SK applies to goods, which move between EU member states, even to those which when moving from one Member State to another cross the external borders of the EU.

Goods shall mean tangible assets, including electricity, gas and water. Goods which have the status of the European Union are:
• goods wholly obtained or produced in the customs territory of the EU,
• goods from countries and territories that are not part of the customs territory, released for free circulation in a Member State of the EU
• goods obtained or produced from products referred to in point a) and / or b).
A declaration must be made before such a product of the EU leaves the territory of Slovak Republic. The reporting obligation does not apply to such goods of the European Union, which pass directly through the Slovak Republic or stopped here due to transport-related reasons. Goods that are not subject to the Intrastat declaration are listed in Annex 2 and they are, for example, gold and official means of payment and securities, including means of payment for services. (Financial Report of the Slovak Republic, 2015)

EU legislation and Slovak legislation
Activities associated with the program Intrastat are covered in legislation of the European Union as well as in the Slovak legislation. One of the main follow-up actions related to the functioning of the INTRASTAT-SK is the actual collection of statistical data on the movement of goods of the European Union.

In Slovak legislation, the conditions for obtaining statistical data and statistical information are governed by several pieces of legislation. Table no. 1 provides a simplified overview of the legislative framework of the European Union and the Slovak Republic which regulate Intrastat.
Table 1: Legal basis of INTRASTAT-SK

<table>
<thead>
<tr>
<th>EU legislation</th>
<th>Slovak legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation EC No. 222/2009</td>
<td></td>
</tr>
<tr>
<td>Regulation EC No. 1093/2013</td>
<td></td>
</tr>
<tr>
<td>Regulation EC No. 1982/2004</td>
<td></td>
</tr>
<tr>
<td>Regulation EC No. 1915/2005</td>
<td></td>
</tr>
<tr>
<td>Regulation EC No. 91/2010</td>
<td></td>
</tr>
<tr>
<td>Regulation EC No. 96/2010</td>
<td>Act No. 652/2004 Col. on customs authorities</td>
</tr>
<tr>
<td>EU Council Regulation No. 2658/87</td>
<td></td>
</tr>
<tr>
<td>Executiv 1101/2014</td>
<td>Act No. 333/2011 Col. Act on state authorities in field of taxes, fees and customs</td>
</tr>
<tr>
<td>Commission Implementing Regulation (EU) No. 1106/2012</td>
<td></td>
</tr>
</tbody>
</table>


Completion of reports

PSI has the option to send the Intrastat declaration in the format of the extensible markup language (XML) through the portal of the Financial Administration or the report may be completed directly on the website of the Financial Administration in the Section intrastate. This service is only available to registered PSI-user name and a password can be obtained from the Statistical Office.

The Intrastat declaration for received or sent goods contains 22 paragraphs. Table no. 2 and no. 3 show the individual paragraphs with a brief description.

Table 2 Completion of paragraphs

<table>
<thead>
<tr>
<th>Name of the paragraph</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paragraph 1 – Provider of statistical information</strong></td>
<td>State Business Name of Provider of statistical information with the full address of seat and VAT number</td>
</tr>
<tr>
<td><strong>Paragraph 2 – Representative</strong></td>
<td>This paragraph has to be filled if PSI authorises a third person/representative, who has to provide the report instead of the PSI.</td>
</tr>
<tr>
<td><strong>Paragraph 3 - Period</strong></td>
<td>The reporting period is the calendar month, in which the tax obligation occurred based on the VAT Act.</td>
</tr>
<tr>
<td><strong>Paragraph 4 – Forms</strong></td>
<td>In the first subsection, the serial number of the form of the Intrastat report has to be filled in. In the second subsection, the total number of filled forms in the respective report has to be filled in.</td>
</tr>
<tr>
<td><strong>Paragraph 5 – Total number of items</strong></td>
<td>State the total number of filled items in the report.</td>
</tr>
<tr>
<td><strong>Paragraph 6 a) – The serial number of report in the reporting period.</strong></td>
<td>State the serial number of the report in the reporting period.</td>
</tr>
<tr>
<td><strong>Paragraph 6 b) – The serial number of corrective report</strong></td>
<td>This paragraph has to be filled in, if a correction report is submitted.</td>
</tr>
</tbody>
</table>

Source: Own processing according to https://intrastat.financnasprava.sk
Table 3: Completion of paragraphs

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>The serial number of item</td>
</tr>
<tr>
<td>8</td>
<td>Description of goods (optional)</td>
</tr>
<tr>
<td>9</td>
<td>Code of the item</td>
</tr>
<tr>
<td>10</td>
<td>Invoiced amount</td>
</tr>
<tr>
<td>11</td>
<td>Member state of destination</td>
</tr>
<tr>
<td>12</td>
<td>Member state of departure</td>
</tr>
<tr>
<td>13</td>
<td>The region of origin (optional)</td>
</tr>
<tr>
<td>14</td>
<td>Region of destination (optional)</td>
</tr>
<tr>
<td>15</td>
<td>Country of origin</td>
</tr>
<tr>
<td>16</td>
<td>Net weight</td>
</tr>
<tr>
<td>17</td>
<td>Quantity in supplementary units</td>
</tr>
<tr>
<td>18</td>
<td>Type of Transaction</td>
</tr>
<tr>
<td>19</td>
<td>Terms of delivery</td>
</tr>
<tr>
<td>20</td>
<td>Means of transport</td>
</tr>
<tr>
<td>21</td>
<td>Signature</td>
</tr>
<tr>
<td>22</td>
<td>Contact information</td>
</tr>
</tbody>
</table>

This paragraph contains the serial number of the item in the respective report.

State the name of the goods, which have to be sufficiently precise in order to be able to assign eight-digit sub-item of the Combined Nomenclature valid in the current year.

State eight-digit code of the respective item of the Combined Nomenclature valid in the current year.

For each item the invoiced amount rounded up to whole euros is stated.

State the name of the member state to which goods have to be delivered. This paragraph has to be filled only in the case of sending goods.

State the name of the member state from which the goods were sent to Slovakia. This paragraph is filled only in the case of received goods.

State the Slovak region, where goods were made.

State the Slovak region, where goods were consumed.

State the country from where goods came from.

The real weight of goods without all covers has to be stated for each item.

Amount received or shipment of goods in supplementary units is given only on those items, which have a combined nomenclature code associated with the unit of measure.

State type of transaction.

Indicate the delivery conditions, which are provisions of the Agreement that specify the obligations of the buyer and seller.

State code of presumed mode of transport by means of transport.

It is replaced with login and password.

State the name and address of the workplace of the person, who completed the report.

PSI has to keep copies of declarations in paper or electronic form for at least 12 months after the end of the reference year.

**Corrected Intrastat declaration**

If PSI or its representative detects an error in any of paragraphs 9-20 in a submitted report, it shall complete a corrected Intrastat declaration:

- If the original invoiced amount changed by 5 % or more and at the same time by at least 15 000 EUR,
- If the original net weight has changed by 5 % or more and at the same time the change in weight is at least 500 kg,
- If the original amount in the supplementary units has changed by 5% or more
For incorrect code of the goods from Member States of dispatch, the Member State of
destination or Member state of origin is in paragraph 10 - the invoiced amount higher than or
equal to 30 000 EUR,
• in case of error in other paragraphs, in paragraph 10 the invoiced amount is higher than or
equal to 300 000 EUR.

Correction of individual items - In corrected Intrastat declaration are only defective items and
it is not necessary to list all items from the original report.

Cancelation of items - If one needs to cancel some items in the corrected Intrastat declaration
(e.g. due to the misplacement to the reference period), the corrected report must be completed
as follows:
• paragraphs 1, 2, 21 and 22 are filled in a standard way,
• paragraphs 11 to 20 are not completed;
• paragraph 3 Period - state the original calendar month to which the corrected report relates;
• In paragraph 4 Form- state the serial number of the form of the corrected Instrastat declaration
in the first subparagraph; in the second subparagraph, state the total number of completed forms
in a corrected declaration;
• In paragraph 5 Total number of items - state the number of corrected items;
• In paragraph 6a) The serial number of the original declaration which is corrected;
• In paragraph 6b) state the serial number of a corrected declaration (PSI may correct the same
declaration several times);
• In paragraph 7 The serial number of item- state the original serial number of the item to be
deleted;
• In paragraph 9 The code of goods- state the original code of the goods;
• In paragraph 10 The invoiced amount -state "0";
• paragraphs 11 to 20 are not completed;

Cancelling of declaration - if PSI or his representative wants to cancel the entire declaration, it
has to fill out the corrected declaration message as follows:
• paragraphs 1, 2, 21 and 22 are filled in a standard way,
• paragraph 3 Period- state the original calendar month, to which the report relates the
correction;
• In paragraph 4 Forms - state "1" in the first and in the second subsection,
• In paragraph 5 Total number of items - state "0";
• In paragraph 6a) state the serial number of the original message that is deleted;
• In paragraph 6b) state the serial number of a corrected declaration,
• paragraphs 7 to 20 are not filled.

Additional items – PSI or its representative shall complete the missing items during the period,
regardless of their value, by submitting another partial Intrastat declaration for the respective
period completed in a standard way.
Filling a form of Intrastat declaration on example of a particular company

In the next section, we will complete an Intrastat declaration for the received goods from EU Member States for a particular construction company.

Example
The company XY Ltd. is engaged in construction activities. It is a VAT payer. Construction material is purchased from foreign partners, who have seats in EU Member States (Germany, Poland, Czech Republic, Italy). In November 2015, XY Ltd. exceeded the threshold of exemption from VAT, which implies an obligation to send an Intrastat declaration of received goods in November. Information about the type of goods, the invoiced amount, the weight, date of delivery, transport and delivery terms are gained from the accounting of the company as well as delivery notes, which are part of the invoice.

Table 4: Goods that came from EU Member States for the month of November 2015

<table>
<thead>
<tr>
<th>Invoice number</th>
<th>State of consignment (registered partners supplying goods)</th>
<th>Type of goods</th>
<th>Invoiced number</th>
<th>Net weight (kg?)</th>
<th>Quantity in additional units (m2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZFA 35 PL</td>
<td>Glasstech 100/100</td>
<td>18 510,-</td>
<td>9 300</td>
<td>20 400</td>
<td></td>
</tr>
<tr>
<td>ZFA 36 IT</td>
<td>Perdura</td>
<td>15 210,-</td>
<td>11 430</td>
<td>19 410</td>
<td></td>
</tr>
<tr>
<td>ZFA 37 PL</td>
<td>Colorgen</td>
<td>18 299,-</td>
<td>14 310</td>
<td>42 400</td>
<td></td>
</tr>
<tr>
<td>ZFA 38 IT</td>
<td>Perdura</td>
<td>20 523,-</td>
<td>16 094</td>
<td>20 290</td>
<td></td>
</tr>
<tr>
<td>ZFA 39 DE</td>
<td>Futrafol 810 tl 1,20 mm</td>
<td>6 079,-</td>
<td>988</td>
<td>1020</td>
<td></td>
</tr>
<tr>
<td>ZFA 40 ČR</td>
<td>Lišty</td>
<td>549,-</td>
<td>200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The first part of the report of their received goods is focused on the identification of the reporting units (paragraph 1). A representative of the Company hasn’t been determined, therefore, paragraph 2 stays blank. In section 3, we noted that the company filled the report in November.
After completing paragraphs 1 - 6b, we continue with those related to specific goods. For goods “Perdurit” that were delivered twice in November from an Italian company, we wrote only a summary item into the report. The reason is that we have the same type of goods and the same country of destination.

Example of entry of the first goods supplied. Code of goods is set according to the current tariff Combined Nomenclature.

Example of entry, which summarizes two deliveries of the same type of goods from the same country:

The total invoiced amount is given by the sum of the amount of the invoice no. ZFA 36 and ZFA 38. The same process is applied to the net weight in kg and the amount in additional measurement units (m2).

**Conclusion**

The aim of paper was to focus on the issue of the INTRASTAT, especially on the area to fill in forms reporting on the delivery or supply of goods. Entrepreneurs often struggle with administrative duties imposed upon them by law. One of those requirements is also filling the Intrastat-SK declaration. However, many entrepreneurs do not have sufficient knowledge on how to correctly complete Intrastat. They often deal with this obligation by hiring third persons to complete the report. Our aim therefore was to provide information about basic steps related to the completion and to provide a brief overview of the basic terms related to the system of collection of statistical data.

**References**

Colný úrad. https://www.financnasprava.sk/sk/institucie/institucia/_cbc27460-92ef-174e-a640-e117a3c1b798


Zákon č. 333/2001 Z.z. Zákon o orgánoch štátnej správy v oblasti dani, poplatkov a colníctva

Zákon č. 540/2001 Z.z. Zákon o štátnej štatistike

Zákon č.652/2004 Z.z. Zákon o orgánoch štátnej správy v colníctve a o zmene a doplnení niektorých zákonov
Implementation of a New European Union Energy Strategy by Means of Selected Marketing Activities

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Abstract

The new energy strategy of the European Union adopted in 2015 allows for a radical increase in the share of renewable energy sources (RES) in the years to come. Pushing through and implementing such a strategy requires sufficient financial resources and managerial skills. Renewable energy sources do not have a chance without supporting mechanisms, and that’s why systematic support by the state in the form of economic and legislative stimuli and marketing support will be inevitable. The aim of this contribution is to cite the management methods and techniques that would make EU member countries include the strategy among their priorities. The author’s objective was to analyse the level of marketing support for renewable energy sources promotion at the national level. This contribution presents the results of qualitative research in the form of personal interviews with representatives of institutions responsible for the issue of renewable energy sources in Slovakia and in the EU, and quantitative research in the form of a questionnaire focused on the non-governmental sector. Marketing activities are an essential part of the implementation of objectives in the field of renewable energy sources on all levels – from the public sector that must understand the economic and environmental benefits of using renewable energy sources, to member state governments that the European Commission must motivate and persuade that their investments in alternative energy sources are correct and inevitable from the point of view of long-term sustainability.

Key words: marketing support, managerial methods and techniques, renewable energy resources

JEL classification: M31, Q01, Q42

INTRODUCTION

The European Union has set ambitious objectives in the field of environmental issues and renewable energy sources. In order to implement such objectives successfully, efficient management must be applied in all realization phases, from anticipation and planning, through implementation of partial objectives, to process checking. The European Union processes are at the professional management level and successful implementation is expected. However, successful implementation of sustainable development strategies depends on how the European institution representatives involved in the preparation of documents, and national institution representatives of member countries, grasp such strategies, as their role in the implementation process is crucial. Sustainable development objectives require public involvement to a reasonable extent and so it is necessary to include marketing and communication strategies in the management processes at the level of member countries. In this regard, it is necessary to perceive the issue of renewable energy sources as a “product” that must be “sold” well by means of appropriate marketing and communication tools.
ENERGY UNION

In February 2015 the European Commission introduced its energy strategy with the main aim of establishing a so-called “Energy Union”. The Energy Union concept was prepared by Maroš Šefčovič, EU Commissioner for Energy, based on the European Union objectives defined in the documents Europe 2020 and The 2030 Climate and Energy Framework of the EU. The Energy Union objective is to secure safe, sustainable, competitive and affordable energy for all Europeans. In order to accomplish such objectives, the European Commission thinks it is necessary to radically transform the European energy system. The Energy Union concept is based on three top priority EU energy policy objectives, namely safe supply, sustainability and competitiveness.

In order to accomplish such objectives, the EU must implement the following five interrelated fields:

1. Energy safety, solidarity and trust
2. A fully integrated European energy market
3. Energy efficiency that helps restrain demand
4. Decarbonisation of the economy
5. Research, innovations and competitiveness

The author’s dissertation research deals with the issue of renewable energy sources included in the Energy Union Framework in objective No. 4, “Decarbonisation of the economy”. It lists the concrete high priority EU objectives.

IMPLEMENTATION OF THE ENERGY UNION

During the first phase of our research it was necessary to analyse the European Union's priorities in the field of renewable energy, and the means of implementing them in Slovakia. The aim of the qualitative research conducted in the form of personal interviews was to analyse Energy Union management at the level of individual member countries, while we focused, in particular, on the management methods and practice used by the European Commission to implement such a strategy.

Energy Union target implementation requires professional management skills. The European Commission must persuade member countries to rank the strategy among their top priorities. With regard to the fact that the volumes of implemented renewable energy sources of individual member countries differ significantly, such differences should be taken into consideration, and countries with a smaller share of renewables should be offered bigger financial, legislative or administrative motivations, for example. The research showed that the European Union uses external experts who create professional strategies within this issue to achieve a high technical level of documents, and to set realistic objectives and priorities at the level of the member countries. Differences between individual member countries, such as the current penetration of RES in the given locality, or natural and economic conditions, are taken into consideration when setting “indicative” objectives for individual member countries. However, each member country selects their own way of fulfilling such objectives, as well as their financial and legislative support mechanisms. The member countries bear responsibility for implementation of the objectives and for the RES marketing strategy at the national level.

The European Commission emphasizes effective implementation of the Energy Union. The strategic document defines concrete governance and the monitoring process to make sure that the energy actions taken at European, national, regional and local levels will contribute to accomplishment of the objectives and to their successful implementation. The Commission prepared the Energy Union implementation plan consisting of 15 action points. Such a plan should secure the effective management of individual
activities. The issue of sustainable development and renewable energy sources is included in two of such action points:

- “The Commission will propose legislation to achieve the greenhouse gas reduction target agreed at the October 2014 European Council both in the Emissions Trading System and in the sectors outside the Emissions Trading System.”
- “The Commission will propose a new Renewable Energy Package in 2016-2017. This will include a new policy for sustainable biomass and biofuels as well as legislation to ensure that the 2030 EU target is met cost-effectively.”

IMPLEMENTATION MECHANISMS PROCESS – NATIONAL ACTION PLANS

Member countries must submit their “National Energy and Climate Action Plans” within EU strategic planning until 2018. National Action Plans will be control instruments of the Energy Union governance mechanism, and, without them, the Energy Union objectives cannot be accomplished. The European Commission considers the National Action Plans to be the basis of reliable and integrated governance and the monitoring process of the accomplished objectives. The aim of the National Action Plans should be to “set out the direction of national energy and climate objectives and policies in a way that is coherent with delivering on the commonly agreed objectives of the Energy Union”; as such, objectives can only be achieved through the collective effort of all member countries. The National Plans will include proposals of policies and measures that should support renewable sources, measures to increase the energy system's flexibility with regard to the production of energy from renewables, and the renewable energy proportion plan until 2030. We assume that the Slovak Republic will have to reassess its renewable energy objectives and priorities.

Member countries will report on their National Plan implementation progress biannually. The Commission intends to assess the overall joint progress at the EU level in annual reports on the state of the Energy Union and, if necessary, to propose political steps and measures to assure accomplishment of the Energy Union's objectives. The Commission agrees to cooperate with member countries on preparation of National Action Plans and it will provide those countries with methodical guidance on how to prepare National Action Plans, including a specific schedule.

NEW DIRECTIVE ON RENEWABLE ENERGY SOURCES

In 2016, a new EU Directive on renewable energy sources should be introduced. It should present policies and measures that could help member countries define their renewable sources objectives and priorities and guide them during the preparation of RES strategies and objectives at a national level. We expect that such a directive will define the direction of the renewable energy policy in Slovakia to a great extent.

MARKETING ACTIVITIES SUPPORTING THE ENERGY UNION

During the second phase of the research we verified and compared whether the European Union and the Slovak Republic were managing the renewable energy sources efficiently. Quantitative research was conducted in the form of a questionnaire with the aim of verifying and comparing how Slovak and Austrian non-governmental organisations perceive the EU approach to the issue of renewable energy sources. The extent of renewable energies promotion in Slovakia was another subject of the research. We verified and compared the current support for renewable energy in Slovakia and Austria and the responsible bodies.
As Graph No. 1 shows, as much as 70% of respondents in Slovakia think that the European Union does not manage the issue of renewable sources efficiently. The Slovak non-governmental sector thinks that much would be solved if the EU adopted stricter rules and sanctions. As long as the RES policy at the EU level only includes strategic proposals, objectives and priorities, and unless a unified system of RER support is adopted, we cannot talk about good management, as such management of renewable energy is in the competence of individual member countries, and they have not managed to implement such proposals, objectives and priorities.

![Graph 1 – The EU’s RES management efficiency](image)

Graph 1 – The EU’s RES management efficiency

Similar to Slovak non-governmental organisations, the Austrian ones are rather sceptical about the issues concerning RES management by the European Union. As much as 67% of them said that the EU, as one of the global leaders in the field of renewables, should set aside more financial resources for the support of renewable energy, so that EU member countries could use the overall potential of the renewable energy sources. Some respondents from Austria would welcome matching the share of the RES and joint enforcement of the countries’ attitudes. Thus, there would be more pressure on individual member country governments and, at the same time, there would be more space for the exchange of information and knowledge between the member countries.

Further, we wanted to know whether the promotion of renewable energy sources by the state was sufficient and systematic in the opinion of non-governmental organisations. We were curious about how non-governmental organisations evaluated the marketing support and whether they were aware of the national marketing strategy. The majority of the Slovak respondents answered in the negative. As Graph No. 2 shows, as much as 90% of respondents answered in the negative. However, such a result was not a surprise for us. Slovak non-governmental organisations consider RES politics and marketing support by the state to be unsystematic and inconsistent. According to the majority of respondents, the state does almost nothing to raise public awareness about the importance of renewable energy for the future power industry; and, vice versa, RES promotion in Slovakia by the state is insufficient, the implementation of renewable energy is presented to the public in connection with an inevitable increase of energy prices, which significantly damages public opinion and also interest in renewable energy sources.
Austrian non-governmental organisations perceive RES promotion by the state in a different way compared to their Slovak counterparts. Exactly 50% of them think that the support is sufficient. Many respondents find that education in the field of RES is insufficient and would welcome more activities by the state in order to raise public awareness of the possible uses of renewables.

At the same time, the research showed that the non-governmental sector organises many marketing activities in support of renewable energy in Slovakia and in Austria. With the aim of making conclusions applicable in practice, we verified which methods and tools non-governmental organisations use for such support.

The comparison of Slovak and Austrian organisations was very interesting. As Graph No. 3 shows, all Austrian non-governmental organisations that participated in our project fully use EU activities and projects aimed at supporting public awareness and education, as well as EU projects aimed at supporting science and research. However, only 30% of Slovak organisations do so (i.e. use financial resources from EU structural funds).

It is also interesting that all Austrian organisations that participated in our research, regardless of their size or operation, do their best to create communication platforms for the needs of RES promotion in
the form of conferences, seminars or workshops. Twice as many Austrian as Slovak respondents ticked promotion by means of distribution of print materials or by means of social networks. Such a substantial difference detected during the analysis was caused by the insufficient financing of non-governmental organisations in Slovakia and the related insufficient use of financial resources from the structural funds. With regard to the fact that Slovak non-governmental organisations use EU financial resources insufficiently, their activities in the field of renewable energy sources promotion are significantly limited.

The Energy Union can only be successful if the state fully assumes its part of the responsibility to support renewable energy resources and creates a marketing plan that would enable the use of renewable energy to motivate the public to join the process of implementation of the Energy Union. The state should influence public opinion in a positive way, to implement the benefits of using renewables, and to motivate the public to become actively interested in the possible use of alternative energies. With regard to the fact that the issue of renewable energy falls under the competence of several ministries, it is hard to determine which one should be responsible for the “National Marketing Strategy for RER”.

CONCLUSION

Enforcement of the European Union priorities in the field of renewable energy sources requires consistent implementation of the objectives set at all levels. It is inevitable that the member countries will include the RES objectives among their priorities. However, it is equally important for the member countries to consequently motivate their citizens to participate in the implementation procedure.

We came to the conclusion that the process of implementation of renewable sources in Slovakia should include the establishment of a state-supported agency for renewable energy or other authority that would be responsible for preparation of a RES marketing strategy in accordance with both the national and the EU priorities. The National Marketing Strategy for renewable energy should include detailed steps for the implementation of the set objectives and priorities, and it should propose a procedure for the efficient implementation of projects in the field of RES. It should show an overview of EU priorities in the field of renewable sources and the possibilities for financial and legislative support by the state. At the same time, the marketing strategy should include a propagation plan and increase awareness about the advantages of renewable energy.

At the same time, we see huge potential in the third sector, which could get involved in renewable energy promotional activities. Our research shows that the third sector is ready to cooperate; however, its marketing activities at the state level must be unified in order to be efficient, or a communication platform with the participation of non-governmental organisations should be created. The research shows that it is necessary to create a platform that would unify the non-governmental organisations supporting individual renewable energy sources. Such a platform would also help unify technical and financial resources and would create better conditions for the enforcement of RES priorities at the national level. The creation of such a platform would also increase the usage of financial resources from the EU structural funds earmarked for the non-governmental sector for the support and promotion of renewable energy.

References


Globalization and Slovak Dairy Businesses – Challenges for Marketing Strategy Development

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Abstract

The impacts of globalization could be seen and experienced in every aspect of human life. Globalization breaks the boundaries and barriers of the cultural, economical, environmental, political, social and technological world and by its influence brings on one hand a number of great benefits, challenges and opportunities but on the other hand barriers, obligations and threats, too. Within following article we discuss the influence and consequences of globalization on the dairy sector in Slovakia as well as present the results of our primary qualitative research that was aimed on studying marketing strategies of Slovak milk producing and selling businesses. Following this, the main aim behind this articles is to show different ways how Slovak dairy businesses deal with the pressure and effects of globalization for the purpose of striving to effectively address consumers and maintain their presence on the milk market. In addition to this, the end of this article is devoted to the presentation of examples of other marketing measures applied by dairy businesses from all over the world that gained success in consumers and contributed to the increase of interest in their products. Altogether, the following article provides practical view on the strategic and operational marketing measures implemented by Slovak and foreign dairy businesses under the conditions of globalization and thus enables to gain valuable insight about various challenges for the development of effective marketing strategy considering the effects of globalization.

Keywords: Dairy Business. Globalization. Marketing Strategy

JEL Classification: M31

Introduction

Many authors agree on that globalization is not a new phenomenon but it could be rather said that it is an omnipresent phenomenon affecting and influencing lives of human beings. Generally globalization represents "the process in which more and more people become connected in more different ways across larger distances" (Lechner, 2009, p. 15). From this definition it is obvious that the main idea behind the globalization is to break the boundaries among individual groups of people and work on building linkages between them in order to create one global nation thinking and acting as a single living organism. For this reason, globalization is increasingly penetrating into any aspect of a society, i.e. cultural, economical, environmental, political, social and technological one and therefore it is manifested by different ways. For example, in the cultural sphere, globalization is demonstrated by confessing the same values, sharing mutual opinions or living similar lifestyle (Watson, 2016), then in economics, globalization is expressed in integrating national economies by the means of supporting the beyond-boarder movement of capital, commodities, products and technologies (Joshi, 2009) or
in political terms, globalization is exhibited in shifting political issues from the national towards the global level (Investopedia, 2016).

On the marketplace there operates three basic economic subjects, namely households, businesses and state. Individual consumers are associated in the group of households and enter a market for the purpose of purchasing products through which they achieve the best satisfaction of existing needs (Lisý et al., 2003). The effects of globalization in consumers is expressed in different ways. For example, from the benefit point of view, globalization by supporting international trade brought consumers a great opportunity to purchase quality products for lower costs from whatever piece of the world or then by introducing the Internet it enabled consumers to get an excellent access to a broad range of information affecting their considering, decision making and behaving when purchasing products as well as shaping the diversity and structure of consumed products. But in addition to this, globalization has brought also a number of serious concerns to consumers such as increased environmental pollution, fading traditions and cultural diversity or spread of violence ideas and dangerous diseases (Collins, 2015). Among the most significant trends propelling European dairy market and influencing consumers acting on it belong aging population, preserving good health and consuming products with lower sugar content (Harrison-Dunn, 2013; Searby, 2012). Beside of this, it is in place to mention one more specifically negative trend observed on milk market causing significant reduction or even abolition of milk consumption and it is massive flow of information, messages and statements about unfavorable and harmful impacts of drinking animal milk on human body disseminated through various communication channels (Furindová, 2010).

While consumers act as a demand side on the market place, the other side, i.e. the side of supply, is represented by businesses entering the market for the purpose of selling produced products profitably. Similarly to consumers, the power of globalization in the business sphere is reflected in positive but also negative way. As for the positives, globalization opened businesses opportunities to offer and sell products on global markets, to relocate business premises to areas enabling saving costs, securing better access to natural resources and reducing tax burden, to establish international partnerships and cooperation or to use new technologies and information helping business to grow; but on the other hand, its boom was associated with several threats such as increased competition, interdependency or labor exploitation (Brooks, Weatherson and Wilkinson, 2010; Collins, 2015).

Globalization and Slovak Milk Industry

Milk industry in Slovakia is composed of two basic sectors. First of them is the sector of primary milk production consisting of a group of milk cooperatives, farms and other business subjects whose scope of business is oriented on dairy breeding, milking and processing of raw milk (Ministerstvo spravodlivosti SR, 2011). Among two key indicators monitoring the effectiveness of activities provided by business units involved in the sector of primary milk production belong the development of average number of dairy cows and milk yield per one dairy cow. While the average number of dairy cows in Slovakia within the period of 2000-2015 reflected a negative trend with the annual average rate of decline 3.58%, the utility of dairy cows was associated
with a positive development with the average rate of milk yield per one dairy cow accounting for the value of 2.68% (Ministerstvo pôdohospodársťa a rozvoja vidieka Slovenskej republiky, 2015). It is really questionable whether this contradiction between the number of dairy cows and their utility is good for the quality (i.e. nutritional composition) of produced milk beside of economic point of view.

Further processing of raw milk is provided by business units involved in the (second) sector of milk processing. To this sector, according to the official updated list of approved milk buyers in Slovakia, belonged 47 registered milk processing business units in June 2014, what is in the comparison with the year 1940, when the number of dairy businesses in Slovakia accounted for the number of 116, the decrease of almost 60% (Mlieko.sk, 2014; Pôdohospodárska platobná agentúra, 2014). Production of dairy products in Slovakia thanks to its long tradition and favorable natural background became one of substantial national agricultural sectors contributing by 18.7% (i.e. by highest proportion from all agricultural divisions) to the total production of agricultural output in the year 2012; however its future is very doubtful since the average rate of Slovak milk production within years 2000 and 2015 is exhibiting a decline of 1.08% (Ministerstvo pôdohospodársťa a rozvoja vidieka Slovenskej republiky, 2014; Ministerstvo pôdohospodársťa a rozvoja vidieka Slovenskej republiky, 2015).

Thanks to globalization, dairy industry in Slovakia has undergone several favorable changes. In the first case, by opening Slovak economy and liberalizing its market, dairy businesses gained an excellent opportunity to place their products on foreign markets and thus to increase their customer portfolio. In the second case, businesses operating on milk market could establish a cooperation with their foreign counterparts and by this way to ensure the inflow of financial means and knowledge necessary for the improvement and modernization of outdated techniques, technologies and processes applied in the production of milk. Finally, in the last case, by persisting on strict compliance with standards and norms settled for the quality, hygiene and safety of foodstuff placed on international market Slovak dairy products could compete with their global counterparts.

Apart from above mentioned benefits and opportunities, the spread of globalization has been accompanied by a number of serious concerns and threats for Slovak dairy businesses. First threat concerns the consequences related to the cancellation of milk quota system that was set up within the European Union with the intention to limit excessive milk production and waste. Since April 2015, when the cancellation of milk quota was realized with the justification that milk regulation under the current circumstances is becoming irrelevant since the demand for milk and dairy products increases from the global perspective, milk industry in Slovakia is struggling with a range of negative consequences (Matošková, Gálik, 2013). Thanks to the exemption of milk market and abolition of paying fees for exceeding settled milk quota European milk market experienced a massive surplus of milk. That would be not so big problem if the European milk market is not hit by foodstuff embargo from Russia acting as the second biggest export market for European Union (TASR, 2014; TASR, 2016). These two situations together with another big threat impersonated in the form of retail stores and their power over dictating prices of sold products have put downward pressure on the purchase prices of milk.
and therefore placed a question mark over the future of milk businesses and even milk industry in Slovakia (Aktuality, 2015).

In order to reverse unfavorable situation in Slovak milk sector, a number of activities and initiatives were realized. In February 2014, it was launched the project of the Agricultural Chamber of Czech republic with the title "White Plus" whose main aim was to increase the consumption of milk and milk products in all populations of the Slovak republic (Bieleplus.sk). In April 2015, Slovak milk producers and processors joined together and started a campaign "Help us to Save Slovak Milk" associated with launching of a paper but also online "Petition on Saving Slovak Milk" and selling of a symbolic "Last Bottle of Milk" and "Last Piece of Cheese" (SITA, 2015). In September 2015, representative of Slovak milk producers jointed the European protest of farmers and milk producers that was held in Brussels with the intention to negotiate better prices of milk (TASR a, 2015). In January 2016, Slovak government reduced VAT, from 20% to 10%, on selected list of foodstuff including two kinds of milk that, according to the statement of S. Voskár, the head of Slovak Dairy Association, should cause the decrease of milk price and consequently lead to higher consumption, that is insufficient from the long term point of view, and simultaneously weaken foreign competition and support Slovak producers and processors of milk, as J. Halgašová, the direction of Food Chamber of Slovakia, said (Sedlák, 2015; TASR b, 2015). Finally in March, 2016, Slovak government provided financial support of 19 million € for the British investor Midia Agro that plan to process 25% of Slovak milk production and export processed milk abroad (Sladkovská, 2016). From this it could be seen that a number of initiatives were undertook to save Slovak milk but we will see whether they would really contribute to overcoming current milk crisis and preserving Slovak milk industry.

Aims, Materials and Methodology

The main idea behind the development of this article is to point out the way how globalization and its effects changed and still changes the face of milk industry in Slovakia and in response to this to describe different approaches of Slovak milk producing and selling businesses on how to deal with globalization pressures in order to gain customer and deliver his satisfaction. In the connection to this, the main aim of this article is to present, by the means of specifying generic and content orientation of marketing strategies, different ways how Slovak dairy businesses deal with the pressure and effects of globalization for the purpose of striving to effectively address consumers and maintain their presence on the milk market. For the purpose of reaching this aim, we undertook a primary business research that took a form of qualitative research and was realized via a method of questioning and a tool of structured questionnaire consisted of 24 questions. The pilot study was realized within the period of two weeks since 18 to 31 May 2015 and the distribution of the final version of business questionnaire was realized from 1 June 2015 to 1 November 2015.

Research sample consisted of businesses dealing with the production and sale of milk in Slovakia. From our business research we omitted businesses engaged in the primary sector of milk industry because of simple reason that they do not deal with developing marketing
strategies and also we skipped businesses called sales cooperatives because the core of their business strategy is simple to purchase milk from dairy breeder and simple to resell it to milk processors. So, in the final consideration the research sample, in total, consisted of 24 businesses from 16 of them belonged to the group of milk producers and remaining 8 businesses belonged to the group of milk sellers (note: in Slovakia, there exist a great variety of businesses dealing with a retail of milk and therefore we focused only to the group of top eight milk sellers). During the period of 5 months of collecting data we by the means of various contact channels, i.e. internet, phone and personal meeting, contacted all 24 milk businesses but in the final consideration we managed to gain participation and obtain primary data from just 5 businesses whose names will be not specified (note: for the distinction of individual businesses we used letters A and B for the representatives of milk producing businesses, and C, D and E for the representatives of milk selling businesses).

What refers to the content orientation of the business research, it targeted on gaining descriptive data on marketing strategies of Slovak milk producing and selling businesses. More specifically, within the concept of marketing strategies, we targeted on two key areas. Firstly, we researched criteria used for so called STP process, i.e. the process of market segmentation, targeting and positioning and secondly, we were interested in finding basic types and knowing key elements of marketing strategies implemented by milk producing and selling businesses on Slovak market. In the connection to this we settled 5 research questions to be answered via our business research:

Q1: What segmentation variables do milk producing and selling businesses in Slovakia use?
Q2: What criteria do milk producing and selling businesses in Slovakia apply for target market/s selection?
Q3: What unique selling propositions do milk producing and selling businesses in Slovakia use for distinguishing them from competition?
Q4: What marketing strategies do milk producing and selling businesses in Slovakia implement for selling milk?
Q5: What is the content of marketing mix strategies of milk producing and selling businesses in Slovakia?

Results and Discussion

Before a business makes decision about the selection of appropriate marketing strategy there are important steps or necessary prerequisites that it has to deal with or consider. First of all, a business has to think of criteria based on which it distinguishes customers on a market and group them by similar characteristics (market segmentation). After that a business has to determine measures based on which it select potentially most attractive groups or segments of customers to target on and do the business for them (target market selection). Finally, a business has to consider the selection of most appealing and mainly unique product features, parameters or benefits that it wants to make its target customers to associate with a product sold (positioning). The results of our business research showed that as for segmentation of consumer milk market three of our participated business respondents introduced that they use the
demographic variable of household size and income (i.e. business D), then geographic variable of location and region (i.e. business B and D), product variable of taste and fat content (i.e. business B) and finally behavioural variable of price sensitivity (i.e. business E). Remaining two business respondents introduced no segmentation variables, from which one of them (i.e. business A) stated that do not segment Slovak consumer milk market (what means that they simply create product and further sell it to customer), and the other one (i.e. business C) was not able to closer identify applied segmentation variables.

The second step in the STP process is the step of target market selection. We asked on criteria applied for the target market selection only within the group of milk producing business respondents. As for the answers, a representative of a business A denoted market size, market growth and purchasing power of market as top three criteria considered in the selection of target market segment/s. Slightly lower degree of importance gained the criterion of market potential, market stability, return on investment, return on investment and own sources and possibilities. Medium degree of importance was given to the criterion of market profitability, costs of obtaining market and number of competitors and even one degree lower level of importance was given to the criterion of barriers to entry market and bargaining power of distribution site. The second milk producing respondent, i.e. representative of a business B associated the highest degree of importance to seven criteria, namely market profitability, market size, market potential, purchasing power of market, costs of obtaining market, return on investments and slightly lower degree of importance assigned to the criterion of market growth, market stability, number of competitors, barriers to entry market and bargaining power of distribution site.

The termination of the whole STP process lies in setting unique selling propositions helping consumers to easily remember, position and associate sold products (or brands) in their mind. By the means of our research we get to know that both of our milk producing respondents use taste and quality as unique characteristics used for distinguishing own produced brands of milk from the competitive ones. Beside of them, the representative of a business A stated that they consider healthy lifestyle and (Slovak) country of origin as preferred positioning variables. In the second group of respondents, i.e. milk sellers, just one business representative, i.e. the representative of a business D, was able to closer specify parameters utilized in the benefit of product (brand) positioning and there were these: taste, quality, price and Slovak origin of product. Remaining two milk selling business representatives of a business C and E, they were unfortunately unable to closer specify used positioning parameters but, despite of that, based on their corporate philosophy we could deduce that they strive to position their private brands of milk as products having a good or even excellent price to quality ratio.

After making decision about attractive market/s selection and specification of unique selling proposition of produced and sold products a business has to make another important decision making, especially decision making about appropriate strategy selection and its adjustment by individual groups of customers. Currently, marketing strategy is becoming one of the most important or better said key functional strategies within any organization. The reason, why it is so, is that today’s market situation, characterized by high competitive pressure, free flow of information, wide range of product offer and frequent introduction of new technological
advances, makes consumers kings and gives them the "royal" power over deciding on what should be produced and offered on a market. In our business research we were first of all interested in finding different kinds of marketing strategies implemented by Slovak milk producing and selling businesses. In the connection to this, we found that our business respondents (specifically the representative of a business A, B and D) mainly implement differentiation strategy in the benefit of gaining competitive advantage; than the strategy of market penetration (specifically the representative of a business B and D) and market development (specifically the representative of a business A) for the purpose of development; and finally the customization (specifically the representative of a business A and D) and differentiation strategy (specifically the representative of a business B and C) for segmenting consumer milk market.

In addition to recognizing general marketing strategies applied by our business respondents our research concentrated on knowing generic and content orientation of individual (four) marketing mix strategies. In the context of product strategy, results of the business research showed clearly the implementation of the strategy of product’s assortment deepening among businesses dealing with the production of milk and the strategy of product’s widening (the representative of a business C and D) as well as enlarging (the representative of a business E) in businesses dealing with the sale of milk. What refers to the brand strategy, belonging to the segment of product strategy, the majority of respondents, whether from the group of milk producers or sellers, introduced that they focus on sale of own (in case of milk sellers private) brands of milk. Among most used price strategies implemented by milk businesses belonged penetration and competition based price strategy (the representative of a business B, C, D and E) but significant representation also gained the lost leader strategy (the representative of a business C and E), everyday low pricing strategy (the representative of a business C and D) as well as psychological price strategy (the representative of a business D and E). Exclusive (the representative of a business A) and intensive (the representative of a business B) distribution strategy were marked by participated milk producing business representatives as preferred strategies of delivering product to target customer and regarding the selection of distribution-communication strategy applied in the benefit of selling milk answers of respondents belonging to the group of milk producers inclined more to implementing push strategy and conversely answers of respondents belonging to the group of milk sellers inclined more to implementing pull strategy.

Beside of knowing individual kinds of marketing mix strategies implemented by milk businesses in Slovakia with the intention to sale milk our business research also focused on recognizing their key elements. In this spirit, business research showed that Slovak milk producers and sellers invest most of their financial means into innovating or improving a number of product features or characteristics, namely smell, taste, fat content, composition, healthiness, quality as well as package material. When it comes to investing into most common tools of marketing communication, the representative of a business A introduced that they all of their financial means (100%) into building its good reputation. Significantly different approach towards allocating free financial means was observed in the representative of a business B who stated that they invest 50% into printed advertisements (in newspapers and
magazines), 15% into personal selling, 10% into TV advertisement, leaflets and samples and 5% into radio advertisement. The representative of a retail store C did not know to precisely associate utilized marketing communication tools with exact percentage and therefore picked ten tools, namely TV advertisement, printed advertisement, leaflets, coupons, loyalty cards, samples, competitions, bargains, direct marketing and good reputation, and evaluated them by same percentage value of 10%. Next milk selling representative of business D specified that that they invest 20% of available financial means into leaflets and competitions, 10% into print advertisement, coupons, club cars, samples and bargains and 5% into TV and radio advertisements. The last representative of milk selling businesses, i.e. the representative of a business E clarified that they invest 20% into print advertisement, leaflets and social media, then 15% into club cards, 10% into bargains and 5% into personal selling, direct marketing and good reputation. In addition to this, the business research uncovered, that all three researched milk selling businesses, within their distribution strategy, try to pay significant attention to cleanliness and atmosphere of their retail stores, a varied range of customer services as well as securing availability of offered milks on shelves. Slightly lower degree of importance, especially in the representative of a business D, gained orientation in a store and arrangement of milk in store and lowest degree of importance, especially in case of a representative of a business C obtained the product place element of store’s location and arrangement of milks in a store. Finally within the concept of price strategy we get to know that all participated milk producing and selling businesses avail the strategy of different pricing levels based on the criterion of brand (the representative of a business B and C), product properties (the representative of a business D), place of sale (the representative of a business A) and consumer’s demand (the representative of a business E) in the benefit of selling milk.

**Best Practice as a Source of Inspiration**

So far we dealt with the presentation of the way how (by the means of describing STP process and clarifying generic and content orientation of implemented marketing strategies) milk producing and selling businesses in Slovakia try to reach, attract and retain customers under the current conditions of market strongly influenced by the power of globalization. Now we would like to point out to our proposals for milk business practice that might contribute to making marketing strategies more customer oriented or better said more fitting to the conditions and trends on current milk market. In formulating our proposals we draw an inspiration from the examples of other marketing measures applied by (not only) dairy businesses from all over the world that gained success in consumers and contributed to the increase of customer interest in their products and that might be consequently effectively utilized, with of course specific modifications, in the benefit of supporting milk consumption and thus in the final consideration contributing to the preservation of milk industry in Slovakia.

Demographic and geographic data about consumers belong to the group of most widely or better said more commonly utilized segmentation variables. Their use, especially the use of demographic variable of household size and income and geographic variable of location and region, has been demonstrated also in our qualitative business research. However, it is important to emphasize that this traditional way of segmenting consumer market (by using demographic
and geographic consumer data) is becoming more and more ineffective from a global perspective due to the reason of high degree of informativeness, dynamics, velocity, busyness, consumerism, diversity as well as striving for excellence so characteristic for our today’s society (Dobrucká, Timoracký, Hrabovský, 2006). Therefore as a possible solution how to fix this M. Timoracký sees in the way of segmenting consumer market by using the knowledge of consumer behaviour and techniques used when purchasing products. In this spirit, we propose to segment consumer milk market in Slovakia based on the concept of product benefits, utility or value provided to a consumers in sold product. One of nice examples of such benefit, utility or value oriented approach towards segmenting consumer market is provided by the Czech company GoodMills Česko, s. r. o. that started to produce and sell tree new kinds of flours whose content is adjusted to the purpose they are used, specifically they introduced the special flour for baking short pastry, then the special flour for baking cakes and finally the special flour for making rising dough.

In analyzing the influence and consequences of globalization in the milk industry in Slovakia we come across one significant problem and it is a problem of low purchasing prices of milk. This is strange from our point of view because dairy farmers who represent the most important element in value creation process, ensuring basic raw material for the production process, represents the weakest element in milk industry and conversely retailers of milk who just mediate a sale of milk holds the greatest power in value delivery process. In the connection to this, there should be implemented significant changes in order to reverse this situation and preserve one of traditional and for Slovakia typical industries. On the basis of success stories of other countries, we see three possible ways how a state could assist in improving the position and situation of Slovak dairy farmers. First way is to apply for grants from the European Union’s funds for covering and recovering from persisting losses that dairy farmers have to deal with on a daily basis. This action was successfully provided by Finnish government representatives who applied for financial support in recovering from consequences of Russian food embargo that in the final consideration already causes and in the future will continue to cause considerable problems to a number of Slovak food producers (Kroet, 2014; Aktuality.sk, 2014). Second way refers to the increase of financial support provided by state towards dairy farmers. The effectiveness of providing better financial support for the development and encouragement of milk production could be perceived on the example of states, such as Belgium, Germany or Netherlands. The last way of improving the position of milk farmers we see in increasing proportion of Slovak and regional brands of milk offered and sold in grocery stores. An excellent example of preserving and supporting of local production is provided by the country of France where local and regional products occupy prevailing position on the shelves of grocery stores as well as minds of people (Bérard, Merchanday, 2007).

As another source of making milk more attractive for consumers lies in the way of advertising and promoting milk. There are two important issues to be considered regarding marketing communication of milk, namely the selection of appropriate target audience and design of way communicating with customers. As for appropriate target audience for marketing campaigns about milk offer we suggests two subjects. As the first target subject we recommend to address female consumers. The reason why we decided for women is simple. From the vocational
theory we know that women make majority, i.e. 85% of all purchase decisions (Barletta, 2003). Taking this into the consideration we propose milk producing and selling businesses in Slovakia to develop and target marketing communication on women because, as the research provided by J. Darroch showed, if a business manages to make its marketing to be more effective to women this causes making marketing effort to be more effective overall (Darroch, 2014). Except of orienting marketing and communicating effort on women, there is one more important segment to target on and it is a segment of children. According to marketing studies provided in USA, children in age from 8 to 12 years annually spend 30 billion $ of their own (pocket) money and have an influence over another 150 billion $ of their parent’s money (note: this children’s influence on parent’s spending refers to the term" nag factor" or "pester power") (Shah, 2010; Marwick, 2014). From this it is obvious that children are increasingly becoming one of very attractive and influential market segment and therefore milk businesses in Slovakia should devote significant effort in educating and addressing them by the means of tailor-made marketing communication and campaign.

Milk market not only in Slovakia but also in other parts of the world is considered to be very saturated and therefore businesses have to look for new ways how to stand out among other "sharks in the ocean". One of possible ways how it could be done arises in the sphere of marketing communication. More specifically, there are (at least) three different modes how marketing communication could be done. First possible mode is to apply on consumers through the trend of healthy lifestyle. Such kind of communication campaign with the title of "Milk Life" reached success in the United States. Within this campaign a milk was promoted as a hero supplying consumers with the superpower of complex and balanced proteins enabling them get boost for their daily activities (Kadison, 2014). Next way on how to popularise milk drinking is to appeal on rationality of consumers by using the results of scientific researches and studies on beneficial and unique positive impacts of drinking milk on human body and health. This way was found to be effective in 1987 when advertising high-fibre cereals by using scientific finding on relationship between sticking to high-fibre diet and reducing the cancer occurrence that resulted in notable increase of interest (of USA’s households) in purchasing high-fibre cereals (Imam, Zadeh, Dubey, 2011). The last possible way on how to attract consumers is to appeal on their emotions. By browsing literature we come across one nice example of appealing on emotions in effective promoting the sale of products. Specifically, the farm company of Deep Root Farm in Santa Rosa Country, Florida launched in partnership with local community a special marketing program focused on appealing on traditions and emotions recalled by memories from the past. The core of this program lied in organizing cooking demonstrations with a tagline "Cook it Like Your Grandma Did" appealing on traditions in cooking and a number of other accompanying events like antique car shows and swing dancing exhibitions recalling memories and emotions from past that gained a high popularity among visitors of farm markets of Deep Root Farm (Sustainable Agriculture Network, 2006).

As indicated, to the unfavourable situation of dairy businesses remarkably contribute retail stores. In Slovakia, retail stores belong to one of dominant distribution channels whose annual total sales is around 17-19 billion € (Odkladal, 2015). Exactly this position provides retail stores with a power over setting prices of sold milk that subsequently cause problems to milk
producers and processors. To be clear, retail stores keep pushing the retail prices of milk down and by doing so they force milk producers to sell produced milk under its average price what causes them difficulties with covering production costs, consequent loses and finally their existence on a market. There are two possible ways how this unpleasant situation could be changed. Within the first of them, we recommend to use more direct forms of distributing milk such as already used milk automats or sales from service years or new ones like farm markets, founding cooperative farm shops or food boxes (whose basis lies in ordering products from a farm by various contact channels and their consequent direct delivering to target customers) that appeared to be very effective and successful in the countries such as France and USA due to a number of benefits they offered to all interested parties. More specifically, such kind of short (direct) distribution channels enabled consumers to benefit from obtaining fresh products, experiencing their quality and obtaining information about production practices used, further producers to benefit from having a direct contact with target consumers by gaining necessary information from them on their satisfaction, needs and expectations, then developing mutual relations, building thrust, creating image over their products as well as having a better control over pricing, sale and distribution of own products, and finally local communities to benefit from gaining an access to fresh products, providing employment opportunities and supporting local economy (Facilitating Alternative Agro-Food Networks, 2010; Sustainable Agriculture Network, 2006). And the second way how to reverse unpleasant situation of dairy businesses caused by the power of retail stores we see by the means of power state and changes in legislation on setting ceilings of profit margins for retailers.

Conclusion

This article provided an overview of the impact and consequences of globalization on dairy industry that is currently experiences another of its milk crises. It’s generally know that globalization is an omnipresent phenomenon affecting and influencing lives of human beings by the means of both positive as well as negative way. As for the dairy industry, from the positive or benefit point of view, globalization brought a number of opportunities from improving the quality, hygiene conditions and technology of produced products, through establishing partnerships, relocating production premises and obtaining financial support from foreign investors, to exporting and selling products outside of country boarders. But in addition to this, the onset and development of globalization was associated with a number of serious concerns and threats, related to the cancellation of milk quota system causing problems with milk surpluses, proclamation of Russian food embargo prohibiting import of milk from the EU as well as other countries, pressure of retail stores over setting milk prices increasing loses and contributing to the disappearance of dairy industry and power of negative promotion moving milk consumption down, whose consequences are faced by dairy businesses in Slovakia on daily basis. From this it apparent that situation in Slovak dairy sector is really serious and recall vocational as well as research attention. Therefore the core part of this article was devoted to the presentation of results achieved by primary qualitative business research oriented that was oriented on knowing marketing strategies applied by Slovak milk producing and selling businesses for gaining customers and delivering their satisfaction under the conditions of current increasingly globalized market.
Based on research results it was found that as preferred variables for consumer market selection are used demographic (i.e. household size and income), geographic (i.e. location and region), product related (i.e. taste and fat content) and behavioral (i.e. price sensitivity of consumers); then as top criteria for target market/s selection are commonly utilized market size, market growth and purchasing power of market; and as popular parameters for building unique selling propositions are mostly availed taste and quality and then also the parameter of (Slovak) country of origin, healthy lifestyle and price of milk. In terms of marketing strategies, the research showed that milk producing and selling businesses mostly implement differentiation strategy for gaining competitive advantage, penetration strategy for developing and customized as well as differentiation strategy for segmenting consumer milk market. The last issue researched by the business research related to the generic and content orientation of marketing mix strategies. In the connection to this, it was found that as regards for product strategy milk producing respondents indicated that they implement the strategy of product’s assortment deepening and milk selling respondents stated that they apply the strategy of product’s assortment widening and enlarging; then what refers to the brand strategy, business respondents reflected a greater tendency towards selling own brands of milk; further considering price strategy, to the group of mostly utilized ones belonged the strategy of market penetration and competition-based strategy but significant representation gained also the lost leader, everyday low pricing as well as psychological price strategy; next in respect to distribution strategy, one of milk producers stated that they use exclusive and the other one intensive distribution strategy; and finally concerning the distribution-communication strategy, milk producers inclined towards push strategy and conversely milk sellers inclined more to pull strategy. Beside of recognizing individual types of marketing strategies applied by Slovak milk producers and sellers, research studied also the content of marketing mix strategies. Following this, the research showed that milk businesses invest majority of financial means into innovating product feature of smell, taste, fat content, composition, healthiness, quality as well as package material, and promotion tools of advertisements, leaflets, good reputation, club cards and bargains; the devote (especially milk selling businesses) significant attention to shopping place’s feature of cleanliness, atmosphere, availability of sold products and customer service; and finally apply for price differentiation based on brand, product properties, place of sale and demand for supporting the sale of milk.

In order to enlarge the source of inspiration for adjusting marketing strategies and practices applied in overcoming consequences of globalization and effectively addressing consumers we, in the final part of the article, formulated several proposals and presented a number of suggestive thoughts coming out examples of success and effective stories of not only dairy businesses. In general, these suggestive ideas concerned several areas. Specifically, the first area was the area of consumer market segmentation in the connection to which we recommended to avail benefit (utility or value) based concept in segmenting market. Then the second area referred to the issue of pushing selling prices of milk down that we proposed to solve by the means of applying for grants from EU’s funds, or increasing financial support from state or by increasing proportion of Slovak and regional brands of milk offered and sold in grocery stores. Next area touched the way of advertising and communicating with customers that we recommended to be done by the means of three different ways, namely by appealing on
healthy lifestyle, rationality or emotions, and targeted on two specific segments of customers, namely women and children. The last area related to the selection of favourable form of distribution that is from the point of view of dairy farmers and processors and their current position in a value chain the direct one (including channels like milk automatcs, service yards, farm shops, etc.) or it could be also the existing, i.e. mostly indirect, one (including channels like retail stores) but only under the condition of state’s regulation of profit margins for retailers.

All in all, the benefit of this article lies in the clarification of STP process as well as presentation of generic and content orientation of marketing strategies applied by milk producing and selling businesses in Slovakia that does not belong to common objects of vocational publications and research studies. As for the research limitation, the biggest barrier was the small size or research sample that did not enable us to gain wider and better insight into the strategic practices applied in influencing and shaping consumers and their milk consumption behaviour. Therefore as possible recommendations for the future research intentions we emphasize a need to develop tempting system of motivation for respondents in order to secure the representativeness of research sample as well as to enlarge the extent of research orientation by issues such as consumer profiles, elements of brand image, positioning strategy, brand strategy or image strategy. We hope that this article will be a practical and useful source of inspiration not only for adjusting marketing strategies of dairy businesses in Slovakia but also for realizing further suchlike researches and studies in future.

References


Brief analysis of the main managing tools of the education and educational effectiveness in the EU

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Abstract

The education and educational system in the EU show the particular common features, however in fact, something called the “European educational policy” does not exist in this sense. Only the educational policy of individual EU countries exists. Each member state has its own educational policy. Even though, the certain recommendations, declarations and common adaptations (e.g. mutual qualification approval) might be shared. Likewise some other fields of the EU policy, in this case, we can notice the unification of the basic pillars – the shared priorities and principles in the educational field have been being pursued, such as the accountability principle, equality of chances, multiculturality, the European dimension, democratism, subsidiarity, employability and the European plurilingualism; information and communications technologies (ICT), environmental education, etc.

Keywords: Education, Trends, Finance of Education, Criterias for financing, Level of autonomie in Education

JEL Classification: I21

Introduction

Educational systems of the EU member states are various, the school structure is different and it is linked to very long and rich history dependent on the member state. The individual EU countries do not wish to change their own educational systems in terms of economic, social and cultural approach and the democratic principles applied in these countries and their identity presently respected do not allow that change either. Therefore, the EU educational policy is not aimed to create the common and unified educational system in all the member states. The education and schools are not under the direct competence of the EU. The concept of the EU educational policy is defined as the set of activities and initiatives (memorandums, key reports, programs on the support of education and the European mobility of students and teachers, structural funds, official non-binding directives, recommendations) of the EU in the field of human resources development including also the field of education.

The present state of the educational system in the EU

The basic pillars of the further EU development, preservation of its competitiveness, facing the changes effectively (the transition to the informative and learning society, explosive growth of the scientific and technological knowledge, world globalization) are as follows: innovations, quality, research, education. The high quality education is the main condition for the permanent
development and introduction of the innovations and superior research, production of the high quality goods with high added value representing mostly the human sense and creativity. Therefore, the high quality education is considered as the crucial source of the future development, prosperity and competitiveness of the EU. It is also the condition for the social consensus, such as the removal of social disparity, misunderstanding among people and social conflicts. The biggest wealth of the EU is the well-educated people.

**General trends in educational management**

To retain its position, the EU has to increase its competitiveness and handle the development trends. Nowadays, the main tendencies in the field of education and main tools of the educational management are as follows:

- To involve more children in the pre-school education.

- To involve schools in providing the education for the immigrants, long-term unemployed, people from disadvantaged environment in order to overcome their issues regarding their attitude towards the education, employment and social integration.

- To modify the school system structure in the way to increase its permeability, remove the blind street that means to make possibility to change the educational way during the study and to proceed in another study after the graduation.

- While creating the curriculum for the elementary and high schools, there is a trend of two-level participation model: state authorities determine so called national curriculum, which normally includes the general targets of education, primary syllabus, obligatory target requirements for the pupils’ output. Primary syllabus should be taught at all the appropriate schools, however its acquirement needs only the part of the overall time dotation. Creating their own programs, the professionalism of the schools increases as well as their responsibility. The cooperation between the schools and companies is developing. To manage the partnership between the schools and the companies is very essential for the future of the EU. Altogether they have to intensify the scientific, technical, technological and economical culture of the EU inhabitants and provide the adequate number of well-motivated and skilled people.

- The European qualification zone has been forming gradually, which the qualifications and studying periods have been accepted in. In the field of academic education, this zone could be formed by general use of the European Credit Transfer and Accumulation System (ECTS).

- Tendency to converge the vocational and general education. The division of the high school education into the vocational and general has become an anachronism. The general education includes also the elements of the technics, technology and economics. The career preparation is transferred to the period after the high school graduation, to the tertiary educational sphere, which results in the prolongation of the educational period of the EU youth.
• The career preparation becomes a part of the lifelong education. Development of the qualification, retraining and learning about new technologies become a part of the job responsibilities.

• The quality of education is ensured by the single national standards and exams, evaluations and self-assessments of the schools, publications of the information about school work results, implementation of the effective strategies to achieve the high quality, e.g. TQM – total quality management, support the innovation activities of the schools, consultancy, teacher education and the international comparison of school work results.

• The number of students in the tertiary educational sphere, which makes a diversification, has been increasing.

• The more attention is paid to the use of information and communication technologies at schools.

• The high schools and universities join the programs of the regional development.

• The further teacher education is extending, teachers’ working conditions, their social status and salaries are improving.

• There is an effort to create the effective and functional system of the lifelong and continuing education.

• The educational management is decentralized. The higher education the school offers, the bigger decisive autonomy the school has.

• The problem of the financing of education. The alternative sources of the financing of education have been being sought for, e.g. the legislative and fiscal measures to attract the investments of the private sector into the education.

• The cooperation of the educational institutions in the EU is extending, the exchange and mobility of the students and teachers is growing.

• The information educational system is being improved.

• The subject of the EU educational policy is not hidden in the legislation and creation of the legally binding standards, but in the systematic and large-scale financial support of individual countries and regions.

**Global education indicators and their significance**

Global education indicators are the basis for assessing the effectiveness of education, as they are based on annual output and measuring of the Organisation for Economic Co-operation and Development (‘OECD’). We focus on the main factors which have influence on learning processes worldwide as well as indicators that reflect the outcomes of learning processes and their impact on the economy and growth indicators in this chapter. OECD (2015)
OECD’s indicators provide rich, comparable and timely data grouping, which reflect the consensus views of professionals on an international method of measuring the current state of education. The indicators provide information about human and financial resources invested in education, how education and teaching systems operate, are developed and what is return of investment into education. These indicators are organized thematically and each of them is accompanied by information on the policy context and interpretation of data.

The indicators of education are presented in the organizational structure which:

- distinguishes among the operators in education systems: individual students and teachers, instructional settings and learning environments, providers of educational services and the education system as a whole;
- groups the indicators in relation to whether they are addressed to results of the study of individuals and countries, policy levers in politics or proportions which these results form or grouping indicators based on past events and the constraints that have brought policy decisions into this context; and
- identifies the questions of politics that the indicators are linked with, under three major categories distinguishing among the quality of learning outcomes and educational opportunities, question of equality of learning outcomes and opportunities, and the adequacy and effectiveness of resources management.1

The program of Indicators of education systems (INES) of the Organisation for Economic Cooperation and Development (OECD) tries to test the operation of the national education system as a whole rather than to compare individual institutions or other regional entities. Although here is increase of opinion that many important character of development, functioning and impact of education systems can be assessed through an understanding of learning outcomes and their relation to inputs and processes at the level of individuals and institutions. Based on this argument, the structure of indicators divided into macro level, two intermediate levels and micro levels of education systems. This refers to:

- the education system as a whole;
- educational institutions and providers of educational services;
- educational settings and study environment within the institutions; and
- the various factors in education and teaching. OECD (2015)

These levels correspond, to some extent, with the entity the data are collected from, but their importance is focused mainly on the fact that many characters of education system operate quite differently at different levels of the system, which must be taken into consideration, as regards the specification of indicators. For example, when we talk about the level of students in the class, the relation between students’ performance and class size may be negative, if students in small class benefiting from improved contact with teachers. Although the students are usually grouped purposely on the level of a class or college, so that weaker or disadvantaged students
are placed in smaller classes so they could be given individual attention. Therefore, the observed relationship between class size and students’ performance at the school level is generally positive, which means that students in larger classes have better results than those from smaller classes. The relationship between student performance and class size, at grouped higher levels of education systems, woven together with other factors such as socio-economic access at schools or factors associated with the culture of teaching in different countries. Therefore the analysis, based just on solely actual data from the macro level, result to misleading conclusions.

The second dimension of organizational structure unites indicators for each of the above levels:

- indicators examined outcomes of education systems, as well as indicators associated with a range of knowledge and skills of individuals, societies and economic systems are merged under the subtitle outputs and outcomes of education and teaching;

- the impact and context of a politics groups activities searching information about political influences and circumstances which profile the outputs and outcomes at every level; and

- these impacts and context of politics usually result from previous events - factors that define or delimit politics. They are presented under the headline previous events and limitations. Previous events and limitations are usually specific for a given level of the education system; previous events at system’s lower levels can be political influence for higher levels. For example, teacher qualifications are a given necessity, meanwhile professional development of teachers is a key influence of politics at the level of the education system.

Each resulted cell in the structure can be used to address a variety of issues from different political perspectives. For the purposes of this framework, the political perspectives are grouped into three classes, which constitutes the third dimension of organizational structure of INES:

- Quality of educational outcomes and educational opportunities;

- Equality of outcomes of education and equality of educational opportunities; and

- Adequacy, usefulness and effectiveness of resources management. OECD (2015)

In addition to the above dimensions, time perspective structure allows to create a dynamic aspect of the development of education systems. Thanks to analysis of the data and comparing them in selected EU countries, we have a basis / starting point for further research for the impact of EU policies and national policies on the quality and efficiency of education. OECD (2015)

**A brief analysis of two management tools in the education**

All the measures are implemented differently in each member state. However, there are the most important areas, which are connected to any kind of those measures:

- School (education) financing.
The level of autonomy (decentralization) of the schools and teachers.

**School (education) financing**

The transfer of the financial sources for the pedagogical employees is provided by the institutions on central level in more than third of the countries. In more than a half of countries, the transfer of the financial sources for the pedagogical and non-pedagogical employees is provided by the institutions one two or three levels. The methods used for the determination of the necessary amount of those sources are two main models. The first one is the method based on the obligatory criteria defined in advance in order to determine the exact amount of the means that should be received by the schools. On the other hand, the second model being used in common and based on the estimation of the school needs, which could be but not necessarily have to be taken into consideration, does not have any criteria defined in advance. Using the second model, the responsible authorities of the school administration are more independent while deciding about the amount of sources, which should be granted to the schools.

Three methods may be identified according to those models (Key Data on Education in the EU“, 1997):

- **Normative financing** is usually connected to the first model. It uses the general criteria and generally agreed rule – to set up the amount of the sources demanded by each school according to those criteria.

- The budget approval is the method usually connected to the second model. The means are granted to the institutions/schools in accordance with the budget elaborated by the schools themselves and proposed for the approval of the responsible public institution.

- The arbitrary determination of sources is also connected to the second model. The amount of means is defined by the appropriate institution. The amount is fixed without the need to refer to any other institution that means there is not any defined formula to calculate the granted amount and the estimation of the school needs may differ from one case to another.

The most often method of the determination of sources for the employees, operating and capital costs is the budget approval, however the self determination works in three countries, such as Greece, Hungary and Portugal. The central/highest level of ministries uses the financial formulas to determine the amount of sources for the pedagogical employees in 28 educational systems. In the most countries, the central/highest level of ministries uses the financial formula to determine the amount of sources for operating goods and services and define the amount of sources for the capital costs according to the estimated needs. The criteria taken into consideration while determining the amount of the school sources are as follows:

- They arise from the criteria defined by the institutions on central/highest level.

- They are based on the inputs, mostly while determining the source level for the teachers.

- They are based on the differences between the schools and regions.
They consider the standard achievement criteria.

The level of autonomy (decentralization) of the schools and teachers

Nowadays, the school autonomy becomes the tool to achieve primarily the educational goals in most of the countries: to give to the schools and teachers more freedom in order to increase the quality of education. Even though all states consider the school autonomy as the matter of education, the policy of extending and choosing the type of autonomy is various in each state. The schools in the Europe do not follow the same rules regarding their competencies and the responsibilities of schools differ markedly in individual countries. The schools in some countries, such as Belgium and Holland, have big competencies based on their history, or Czech Republic, Estonia and Sweden based on their recent past. On the other hand, mainly in south European countries (Greece, Spain, France, Portugal), the competencies for schools were limited, however some of mentioned states were leaders in the field of the educational policy. Regardless of the autonomy level, the content of the school autonomous policies was also very different among the countries. The transfer of the competencies may influence the teachers’ obligations, human resources management or financial sources differently. The countries did not lay stress on these three fields of competencies. Some of them preferred the transfer of financial and human resource management competencies in relation to the teachers, such as Estonia, Ireland (at the level ISCED 2), Latvia and the United Kingdom. Generally, there exists a certain level of consistency of the reforms to the intent that even though one area of competencies is highlighted, the level of autonomy recognized in other areas is not distinct diametrically. On the other hand, some countries, such as Italy, focused more on pedagogical autonomy allowing the institutions to be more flexible while defining the syllabus and time tables. No country delegated total autonomy to one area (learning process, finances, human resources) while restricting the freedom in another area. Though there is the intention to make the local participants independent in some areas more than in others. Implementing the policies of school autonomy is different markedly in dependence on institutions or individuals, whom are the competencies transferred on. Depending on the country and the area of competencies (finances, management, human resources etc.), it may be the school management, headmaster, teachers at various positions. There is the level of consistency between the chosen decision model (organization) and committed institution/people. In the case the schools have the autonomy of financial management, the headmaster and school board are usually those bodies with the right to make decisions, such as the Flemish Community in Belgium, Slovenia, some parts of the United Kingdom (England, Wales and Northern Ireland) and Norway. Similarly, the headmaster is responsible for selecting and hiring the teachers if the schools have these competencies, such as in Bulgaria, Czech Republic Estonia, Latvia, Lithuania, Hungary, Poland, Slovenia, Slovakia and some northern countries. The miscellaneousness could be found also in the composition of the school management, which might be more or less open for the members of external communities.

Decentralization and school autonomy, the base of which creates the part of regulations of New public management, has changed the level, at which the schools operate regarding the human resources and financial management, as well as learning. This new sharing of competencies
among the central government, local and regional authorities and schools changes the attitude towards the educational activities, especially while drawing up the educational plan. In the most European countries, there was the central government or the highest educational authorities (Länder in Germany) primarily responsible for the educational plan, but the new division of competencies among the main participants has become a standard that has been essentially changing the activities of the teachers at schools and in the classrooms. In all the European countries, the situation, in which the educational plan was treated by the central level without the participation of the local authorities or schools, is changing into the state, in which the educational plan is created by several organs, including the schools and teachers. These new forms of the autonomy may be various. In the model typical in some Northern and Central European countries, the central (or highest) public authorities assign the general structure creating the main features of the educational plan, which are consequently elaborated in details by the local and regional authorities, as well as teachers at schools. In the second model, which includes the educational plan focused on the target achievement, the school autonomy goes much further. In this case, the central government does not define the content of the educational plan, but it defines the educational goals, which should be achieved in order to complete the main levels of the school education that means the schools can elaborate the details of their educational plan more freely. (Key Data on Education in the EU“, 2005) Finally, the third model and its two independent approaches: on one hand, the national educational plan defined by the central government for some subjects and on the other hand, the educational plans elaborated by the local or regional authorities and schools for other subjects. Following these three approaches, which the educational practice could be based on, the teachers are not obliged to follow the detailed centralized educational plan, but they are forced to make individual educational programs instead in order to take care of the pupils more effectively. Key Data on Education in the EU”, 2005).

**Summary**

Under the conditions of demographic and population changes, new pressures of the global competition and simultaneously happening increased migration, which brings new challenges in the field of the social cohesion, as well as long-term issues of the minority integration, the individual European countries highlight the need of the reasonable and inclusive educational systems modified in the way of equality, efficiency and quality, taking into account their main elements in the form of receiving the key competencies, new approaches to the management and leadership and increasing the teachers’ quality. Furthermore, the above mentioned social and economic issues create the space for the action of other policies (social policy, labor market policy, migration policy).

The goals of the educational management and educational policy include also the goals of the effective allocation as well as the goals of fair distribution. The political decision and also the scientific evaluation could announce the level of the achievements of these goals. Clearly, the goals of efficiency and equality are not limited by the educational policy itself. These goals should be combined with those of the related policies, such as social policy, labor market policy
and also the migration policy, which meaning has been growing constantly considering the aging of the European population and migration movements. The goals of equity may be expressed in the form of the results of the educational system and vocational trainings, for example by the test results or the labor market results from the external point of view.

The quality of the education systems and institutions, in which the learning process is performed directly, relate to efficiency itself. The quality and efficiency are mutually connected, whereas the efficiency depends on the quality of the education. Speaking of efficiency and quality of the education, these main elements are recognized: key competencies acquisition, new approaches to the management and leadership, challenges for the teachers.

The efficiency as one of the goal of the educational policy is influenced by several factors, such as educational environment, support of the intellectual freedom, motivation, pedagogue, who applies the didactic means and teaching aids during the learning process, experiment and creativity, development of self-management in education, providing the feedback and determining the other goals of the education. The quality of mentioned determinants influences the development of and results obtained in the educational process.

Considering the population structure, the modifications of all the levels of the educational system are needed. The European educational systems should be modified in the way of equality, efficiency and higher quality, whereas the knowledge and skills obtained effectively may determine significantly the sustainability of the growth, creation of new job positions and competitiveness of the economy generally.

References


Evropská unie a vzdělávání. In Příloha Učitelských novin (22-23/2003), Praha, 32 s. (Title: The European Union and Education, Journal Teachers´ newspaper)


Key Data on Education in Europe” (2005), Brusel : Eurydice. ISBN 92-894-9422-0.


Vzdelávacia politika európskej únie.“ In Pedagogické rozhľady (2/2003), Banská Bystrica : Časopis metodicko-pedagogických centier Slovenska. 8 s.
Labor Market Flexibility

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Abstract

Major changes in world production and international trade suggest that the new economy will require new and sophisticated management. Therefore, it will be necessary to increase labor market flexibility. Studies often suggest that flexibility is the best way to increase employment. However, fundamental questions like: "What's really flexible?" "What kind of flexibility is more appropriate?" are unanswered. Moreover, another important question to be answered is: "Are there any side effects due to the labor market flexibility?" The aim, therefore, will be to find answers to these questions. The article will address the following: the definition and the importance of flexibility, its categorization and brief nature of the various flexible forms of employment; I will reveal the benefits and risks associated with the introduction of flexibility in the labor market in relation to employment, and also analyze to what extent flexible labor market contributes to competitiveness.

Key words: flexibility, labor market, flexible forms of employment, benefits and risks of labor market flexibility

JEL Classification: E24, E29

Introduction

As part of the quickly changing environment, organizations face globalization of business. The changing business environment means change in the organization also. The change process is an effect of making efforts for a sustainable existence in a turbulent business environment. Organizations are required to innovate and quickly adapt to the changing market requirements. The notion that we have entered a new era in economic development where knowledge and information are the primary sources of value creation is widely established in the management literature (Drucker 1993). Moreover, the increasing competition among the companies and a quest to be part of globalization force organizations to quickly respond to these changes. Organizational responsiveness depends on the concept of flexibility (Verdú & Gómez-Gras, 2009). It is therefore seen that the business leaders focus on making more efficient decisions about their valuable resources. The new models of employment are replacing the old ones. Where the traditional model of employment was based on fix employment’s cost the latest forms provide a greater opportunity to monitor the labor cost and also allow the employers to use their human resources more efficiently (Jahn, Riphahn & Schnabel, 2012). Furthermore, the new forms of employment are also aimed at development of employees and this helps organizations to keep the talented workforce, who, by their knowledge, qualifications and skills create a competitive advantage for the whole organization. The flexible working arrangements have become one important means of balancing work and personal life. (Russell, O’Connell
This paper aims at understanding the different aspects of flexible forms of employment and flexible work arrangement in terms of flexibility on the labor market.

**Methodology**

The research methodology of theoretical analysis requires gathering relevant data from the specified documents and compiling databases in order to analyze the material and arrive at a more complete understanding of the importance of flexibility.

Data are obtained mainly from numerous internet sources of documents and libraries, online articles, journals and hard copy books. All sources are analyzed according to the appropriate procedures. Information is processed synthetically. This enables to examine and understand the research topic correctly.

**Flexibility**

To be flexible means to be able to change according to the needs; and to stay operational in certain or uncertain conditions. This adaptability is necessary for organizations that, for economic reasons, are approaching efficiency in organization and management (Bucki and Pesqueux, 2000). Flexibility is an essential approach to the management in uncertain environment (Sanchez, 1995). In an uncertain environment, sustaining competitive advantage means having greater strategic flexibility which requires to have flexible resources and capacity to reconfigure and redeploy them quickly, at low cost to satisfy the demand of the environment (Ketkar and Sett, 2010).

Flexibility refers to the numerous components in an organization such as strategy, structure, operations, human resources, etc. (Verdú & Gómez-Gras, 2009). Flexibility has been considered as a dynamic capability (Grewal and Tansuhaj, 2001); or ability to adapt to diverse demands of the dynamic environment (Sanchez, 1995), and it is perceived to be a key factor in the accomplishment of economic growth (Atkinson, 1985). Dynamic capabilities comprise ability to assemble and reconfigure competencies that can lead to greater innovativeness in reaction to changes in uncertain environment (Eisenhardt and Martin, 2000). Human resources have become a reservoir for business flexibility (El-Awady, A., Duquenne, P. and Le-Lann, J., 2014) and their knowledge, skills, behaviors and talent may be considered as part of a dynamic capability (Ketkar and Sett, 2009, O’Connor, 2008). According to Atkinson (1985) flexibility in employees’ skills and behaviors is known as functional flexibility and quantity of human resources as numerical flexibility.

**Functional flexibility**

Functional flexibility implies that employees can be redeployed and is able to use his skills across wide range of tasks (Atkinson, 1985) and under various circumstances and that the cost and time necessary to deploy employees into new workplace are low (Van den Berg & van der Velde, 2005). Having more functionally flexible core workforce means that they can accomplish more tasks and take over more jobs through job rotation. Such flexibility can be achieved through job enrichment and enlargement to obtain functional flexibility. Employers
with multi-skilled employees can easily adapt to the ups and downs of market without employee downsizing (Madhani, 2015).

**Numerical flexibility**

Numerical flexibility is “the ability of firms to adjust the number of workers, or the level of worked hours, in line with changes in the level of demand for them” (Atkinson, 1987). This requires appropriate legislation and policy.

The numerical flexibility has two forms – external and internal.

*Internal numerical flexibility* means the ability of the organization to balance the quantity of human resources to meet the demand for them (Martínez-Sánchez, 2008). It also gives flexibility to employees by increasing or decreasing the number working hours when necessary (Kok and Lighart, 2014). This refers to working time flexibility such as overtime, short-time, and part-time work (De Groot and Elhorst, 2008) and can be beneficial for manufacturing firms (Haddad, Shediac, 2010).

*External numerical flexibility* means adapting the quantity of workers by replacing the current workers (Atkinson, 1987). Such changes include flexibility on the external labor market as temporary employees from employment agencies, and temporary workers on fixed term contracts hired due to their specialized skills (De Groot and Elhorst, 2008). To achieve flexibility, employers need to change contractual relationship between organization as an employer and workers (Atkinson, 1985).

**Flexible forms of employment**

In the era of globalization and increased competition, many organizations consider their employees to be their potential source of competitive advantage because of their abilities to create, use and share knowledge. Therefore, if organizations choose a way of achieving a sustainable competitive advantage through their human resources, they should develop practices that allow it to leverage and use these resources efficiently (Madhani, 2013). Many organizations have decided they can be more efficient and increase their flexibility by changing many jobs arrangement (DeCenzo, 2010). Therefore, employees have *flexibility in time*, this allows employee to choose number of working hours per day or days per week. Examples include flextime, compressed workweeks, job sharing, flexible shifts and seasonal work. *Flexibility in location* allows employee to choose the place where he performs the work. Examples of such flexibility include telework, remote work and hoteling. There are still many other forms in different setting (*large and small firms, manufacturing or service firms*) as well as through hierarchical and social levels (*first-line managers, top managers and workers with lower income*) (Grawitch, Barber, Maloney, 2009; Kossek, Thompson, Lautsch, 2015).

Work flexibility comes in many forms, but usually refers to three types of work arrangements: *part-time employment, temporary employment and contractual employment* (Haddad, Shediac, 2010).
Part-time workers

Part-time workers are traditional employees who work on less than a full time basis, which is considered to be less than forty hours per week (Horne, Williamson, Herman, 2005). Working mothers who want to increase family income without being fully committed to their employers, students financing their studies or retired workers trying to augment their income tend to use this form of employment. It offers more opportunities for employers to balance work hours based on their needs as well as to reduce cost of benefits (Haddad, Shediac, 2010).

Temporary workers

Temporary workers such as part-timer (DeCenzo, 2010) is person who is hired, trained and paid by staffing firm also called temporary help agency. Temporary agencies tend to match the worker to be supplied with clients and assign them to work in client offices based on their knowledge, skills, abilities and job requirements (Kuroki, 2012). The staffing firm is responsible for recruitment and selection, training, compensation, performance evaluation, retention services as well as for the payroll for temporary worker. If the organization uses temporary employees through a staffing firm, both parties should prepare and enter into well-structured agreement that includes list of specific services to be provided (Heneman, 2015). Organizations tend to use temporary employment as compensation for absences due to illness, skill shortages, or seasonal fluctuations due to vacations or holidays (Haddad, Shediac, 2010). Persons hired for temporary or part-time work are paid at the hourly rate agreed upon when employed and are afforded few employee benefits except paid vacation or paid holidays (Lawson II., 1998).

Contract workers

Contract workers or outsourced employees provide specific task and project assistance to the organization, such as maintenance, advertising, programming and consulting (Heneman, 2015). Employment is limited in duration and fees are paid upon completion of particular conditions that are covered in the written agreement. This type of employment is used due to fixed labor cost and cost related to core employees is omitted. Contract employees usually fall within these definitions such as food service workers, computer programming specialists, and security services personnel (Horne, Williamson, Herman, 2005).

The context in which various types of workplace flexibility will be implemented will have direct impact on how organizations will benefit from them (Grawitch, Barber, Maloney, 2009).

Implementing the flexible work schedules is beneficial for both, employer (provider of flexibility) and employee (flexibility user), but when developing flexibility policies and practices, the interest of all stakeholders – providers, users and non-users should be taken into consideration and balanced in their implementation (Kossek, Thompson, Lautsch, 2015).
Benefits and challenges associated with the flexible forms of employment

Kossek, Thompson, Lautsch (2015) identified some benefits and challenges for both, employers and employees, associated with workplace flexibility.

Benefits for employers and organizations

- Organizations can expand global markets
- Organizations are able to attract and hire from a greater pool of qualified and highly skilled applicants
- Organizations can become more accessible to customer needs around the world
- Reduced cost associated with recruitment, training and termination of employment
- Long term retention of qualified workforce due to flexplace policies
- Reduced labor cost
- Reduced cost related to benefits for full time employees
- Reduced turnover cost
- Reduced overtime by using flextime schedule
- Less absenteeism and accidents from non-work distractions
- Higher productivity of employees

Challenges for employers and organization

- Synchronize and coordinate employee schedules; and align them with clients’ needs may be difficult
- Increased paperwork due to hiring applicants each year or season
- Managers working during the day are not able to supervise employees working overnight
- Difficult to foster commitment of employees, manage communication and coordinate teams
- Increased cost of technology used for communication among organizational members
- Flexibility may lead to negative, rather than positive outcomes

Benefits for employees

- Lower role overload
- Decreased stress
- Less chances to burnout
- Less work-family conflict
- Comfort/clothing
- Increased motivation that leads to better performance

Challenges for employees

- May not be able to meet all non-work responsibilities
- Longer work day can lead to burnout, work-family conflicts, metabolic and cardiovascular disorders
- Working less results in decrease in compensation
- Lack of communication with colleagues and supervisors
- Unclear role identification
Flexible forms of employment can be both a boon and bane to the labor market (Jahn, Riphahn & Schnabel, 2012). Research shows that workplace flexibility reduces physical contact between flexible workforce and other organizational members. Lack of interaction of flexibility user results in feelings of isolation, and this makes them feel less like part of the organization. These changes in relationship between flexible workers and employers represent the challenge related to the performance management. (Kossek, Thompson, Lautsch, 2015). Therefore, managers should remain the personal communication and contact with their flexible employees (Lautsch, Kossek, Eaton 2009).

Discussion

This paper has sought to assess the labor market flexibility and its forms. The primary purpose of this study was to examine and understand the different aspects of flexible forms of employment and reveal benefits and drawbacks of flexibility in relation to employment, performance and competitiveness of the organization. Previous studies have shown that flexible labor markets help organizations to be more efficient and competitive; increase output and lower unemployment, but there is no generally confirmed long term and short term correlation. This analysis revealed no significant difference. The results emphasize the importance of flexibility on labor market for both managers and organizations. The analysis in the present study established the general proposition that a modern workforce, changing market and technology improvements are just a few reasons why flexibility is the only way to success for many firms.

To improve the efficiency of labor markets by greater flexibility requires developing a complex legal structure for flexible employment. The paper result may be summarized in the need for a more sophisticated approach. There is no doubt that more flexibility is needed, but what kind and for which circumstances it is more difficult to answer. Further research should investigate this topic in greater depth.

Conclusion

External environment of organizations is getting more competitive and globalization is becoming an important part of business world. The need to be competitive has driven many organizations to expand internationally, presenting increased challenges for human resource management (Friedman, 2007). The flexibility in terms of work arrangements is providing a profitable tool to gain a competitive advantage. However, many countries are not paying enough attention towards the employee protections pertaining to labors being part of flexible work practices. (Gov.uk, 2016). Flexible forms of employment have increased substantially. Higher labor market flexibility appears undoubtedly advantageous to employers. Increased labor market flexibility create opportunities for young less-skilled workers, immigrants as well as helps firms to screen employees’ performance and productivity, to find replacement for staff members who are on maternity leave or sick leave and to avoid firing cost and wage cost (Jahn,
Riphahn & Schnabel, 2012). Flexible work arrangements are used for adjusting staffing levels quickly in response to changing market conditions as technology or consumer demand (Heneman, 2012). This helps managers to attract, motivate and retain talented workforce. However, managers need to take into consideration that people have different preferences for scheduling options and benefits. Therefore, today’s organizations need to adapt to various needs of a diverse workforce by creating a workplace that offers an extensive range of scheduling options and in which employee flexibility and work-life balance is possible. (Robbins, Coulter, 2016).

References


Grawitch, M.J., Barber, L.K., Maloney, P. (2009), Work Flexibility Comes in Many Forms. [pdf], Saint Louis University. Available at http://www.slu.edu/Documents/professional_studies/OHI-Work%20Flexibility.pdf [Accessed March 9, 2016].


Trends in E-Business and their Application in Development of SMEs in Slovakia

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Abstract
The aim of this paper is to analyze the current trends in the area of e-business and e-commerce with a focus on the possibilities of how these trends contribute to the development of small and medium-sized enterprises (SMEs) and increase their competitive advantage in the Slovak market. The focus is on SMEs because they are a very significant and important part of the Slovak business landscape – according to statistics from the Ministry of Economy, SMEs make up 99.9% of the total number of Slovak businesses providing jobs for 71.8% of the active workforce. It is becoming increasingly important to advance with the times and therefore use all available resources to help achieve companies’ business goals. The theme of this paper highlights the importance of monitoring trends as part of Slovakia’s progress in the field of e-business. Part of this paper is a statistical analysis comparing the development of online sales in Slovakia and abroad in recent years showing an upward trend in active use of e-business within companies. An important part of the analysis is the comparison of the situation in Slovakia and the Czech Republic, where the development of e-business is in full swing. A subject of the research is the ever increasing use of mobile phones for purposes other than calling and how to use this mobile platform for e-business purposes to facilitate and improve the sale process.

Keywords: e-commerce, e-business, online marketing, sales promotion

JEL klasifikácia: M20

INTRODUCTION
The range of goods in the past was limited and people didn’t have much choice. Right now, people are getting increasingly interested in the quality of goods and service. They are comparing competing products, reading all sorts of customer reviews and only after taking all of the aspects into consideration they decide whether or not to buy. Besides, there are many shopping possibilities. Consumers can either shop in-store (brick-and-mortar), CATALOG RETAIL, or opt for one of the many online shops. According to Eurostat, over 60% of internet users in Slovakia are using it to search information about goods and services. When a customer decides to buy specific product, he can use a price comparison tool such as Heureka.sk to compare the product prices, delivery options or check the online shop ratings and reviews.
Advantages and disadvantages of E-commerce

E-commerce differs from traditional commerce in that e-commerce is conducted through an electronic medium. Integral part of e-commerce consists of online transaction processing, email, telephones, credit cards, information sharing, automated systems, etc. However, the most electronic transactions are generated through the use of web and online stores.

There are many different ways of conducting commerce over the Internet and it covers selling of goods as well as services or information. The term “services” applies to selling multimedia, news, publications, apps or educational materials. Online shops (or e-shops) are selling various kinds of goods (wikipedia).

Table 2 – Different kinds of electronic commerce

<table>
<thead>
<tr>
<th>Kinds of electronic commerce</th>
<th>Note</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B</td>
<td>One business makes a commercial transaction with another</td>
<td>Business to Business</td>
</tr>
<tr>
<td>B2C</td>
<td>Offerings to consumers</td>
<td>Business to Consumer</td>
</tr>
<tr>
<td>C2B</td>
<td>Consumers create value and business consume that value (e.g. writing reviews)</td>
<td>Consumer to Business</td>
</tr>
<tr>
<td>C2C</td>
<td>Online auction (eBay)</td>
<td>Consumer to Consumer</td>
</tr>
</tbody>
</table>

Table 3 – advantages and disadvantages of ecommerce

<table>
<thead>
<tr>
<th>Advantages and disadvantages of ecommerce for business and consumers</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages</td>
<td>Cost reduction – no need to run a brick and mortar store</td>
<td>According to the type of product, the competition could be bigger</td>
</tr>
<tr>
<td></td>
<td>Expand their market to national and international markets with minimum capital investment</td>
<td>Lack of touch or feel of products during online shopping</td>
</tr>
<tr>
<td></td>
<td>Building a better relationship with consumers – feedback, loyalty programs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time saving – products are easy to locate and can be delivered to your door in just days</td>
<td>Overhead in case of reclamation</td>
</tr>
<tr>
<td></td>
<td>Lower prices for many items compared to standard store</td>
<td>Unverified shops and privacy problems</td>
</tr>
<tr>
<td></td>
<td>Delivering goods to your door-steps</td>
<td></td>
</tr>
</tbody>
</table>
Current trends in e-Commerce - tools

Social marketing – marketing using social media – from which the social networks are used the most. Facebook is the most popular social network in our country, but in the rest of the world you can rely on other popular options like Twitter, Instagram, Pinterest, etc.

Content Marketing – involves the creation of valuable, relevant and consistent content to acquire and retain customers. Potential customers are attracted to the brand through the interesting content and the company doesn’t have to rely only on traditional and already overabundant advertising. It’s like the customers find their way to the product all by themselves.

SEO (Search Engine Optimization) – techniques and strategies for optimization of web pages for search engines – paid and free.

PPC – form of Internet advertising using a so called pay-per-click model. Advertiser doesn’t have to pay each time an ad is displayed; he pays only after the ad is clicked. This advertising model provides a way to target certain group of customers according to advertiser preferences.

Landing page – is a single web page that appears in response to clicking on a search engine, optimized result or an online advertisement and should contain the same information as the advertisement, search result or link.

Responsive web design – is an approach to web design aimed at crafting sites to provide optimal viewing and interaction experience across wide range of devices. Web site adapts the layout to the viewing environment.

Remarketing – is a strategy to bring the visitor, who didn’t make a desired action, back to your web site using targeted advertising campaigns using e.g. PPC. Previous visitors or users will see your ads as they browse other web sites.

Analytics – measuring data is also important and there are several ways of how to do it. Most widely used is Google Analytics, which enables to track several metrics, e.g. number of page visits, number of unique visitors, average time on page and others.

Email – communication with customers and partners. Email is often used for marketing.

Intranet, Extranet – private networks with web pages for employees used for various purposes and private web pages, which allows secured external access to business information.

Webinar – seminar or presentation that takes place on the Internet – online seminars, workshops

Cloud – several parts of the Internet that allow online processing and storage of the documents and data as well as electronic access to software and other resources.

Online payments – Credit card; Internet banking; Internet payments: TatraPay, VÚB Platby, Platim cez ČSOB, sporopay, OTP pay, mTRANSFER, UniPlatba, or internationally renowned PayPal;
Apps and games development for web, tablets and mobiles – it’s one of the options how to gain attention for your product or facilitate the usage of some of your products.

Besides above mentioned tools, Internet provides a load of other alternatives, apps and tools to improve or refine your web, various analytics tools for measuring campaigns effectiveness or assess refinements done on the web. Some of these tools are paid, some are using the freemium model, while others allow companies to evaluate them and find out if they are really useful or not.

Statistics
Let’s take a closer look at the statistics of internet sales in Slovakia and Czech Republic in latest years.

![E-Buying in 2015](image)

Table 1 – online shopping

The table shows the percentage of internet users in 2015 and the ratio of buyers (who shopped at least once online). In 2015 online shopping amounted up to 21% of the overall revenues in Slovak economy that represents growth of 31,3% comparing to 2014. In Czech Republic the growth after 2014 was 3,4% and amounted to 30 % of the overall revenues.

In May 2015 Slovak Association of Electronic Commerce (SAEC) released their members’ online shopping data from 2014. According to Jozef Dvorský (SAEC) the results confirm the increase in the number of online orders as well as in overall revenues.

In Slovakia estimated revenue from the electronic sale of goods and services in 2014 reached 750 million Euros. Out of this sum, 45% (337 million Euros) was made by certified online shops that are holders of “SAEC – Safe shopping” certificate. In comparison to 2013 the increase in online orders of goods was 200 000 and the revenues increased by 17,5 million Euros. The online orders of services increased by 38,9% and the revenue by 24,4%.

The most preferred payment by online shopping is still cash by delivery. Many consumers use the possibility to pick up the goods directly in the store or place of sale. In this case there is the possibility to pay cash or by the credit card by the pick-up. According to some researches credit transfer and online payment by credit card are less desired.
Worldwide statistics
Statistics from Eurostat (2016) show that 65% internet users did online shopping in 2015.

The table shows that the most popular categories in goods are clothes and sports gear, in services it is vacation and accommodation. In both categories it amounts to more than half of e-customers. It also shows the preferences in different age categories.

In the question of multiplicity, the biggest amount of customers used online shopping once or twice in the 3 months prior the survey (39%). Customers paid mostly 100 to 499 Euros (40%) and up to 30% of them ordered from other EU countries. The number also increased from 2012 when it was only 25%.

E-shops in Slovakia
There are almost 7 000 e-shops registered in Slovakia, however only 134 of them have been granted the official certification. The certification requirements are set by the Slovak Association of Electronic Commerce (SAEC) based on valid Slovak legislation. According to heureka.sk at least 70% of all e-shops are small businesses, which are owned and operated by people, for whom they represent only secondary income. In comparison with Czech Republic, where currently is present almost 37 thousands e-shops, the number of Slovak e-shops is quite low.

Small and medium-sized enterprises
Small and medium-sized enterprises (SMEs) represent a substantial and significant part of Slovak business environment. According to the Ministry of Economy, almost 99,9% from all the business entities are currently SMEs. They employ approximately 71,8% of all the active labor force.
Most of the SMEs have until now barely scratched the surface of all the possibilities which e-commerce offers. However the trend from the other countries abroad is very clear. If they want to survive, it is essential and absolutely necessary to start focusing on all the opportunities of e-commerce. Why is it so important for SMEs to focus on e-commerce? During the “search” and “decide to buy” phase of shopper’s behavior, the end consumers are currently using more and more sophisticated internet tools and channels, to find more information, to compare prices or directly to buy products and services. SMEs cannot afford not to be a part of this.

As we have already mentioned, in 2015 almost 81% of Slovaks were regularly using the internet. Half of them have used the internet to purchase goods and services. The most purchased commodities through e-shops are electronics, clothes, sports equipment and household equipment. The least purchased via e-commerce are the financial services. The “discount” websites represent very specific category of e-shops. On these websites, the end users can purchase all desired services or products for a reduced price. The number and popularity of such websites is constantly increasing.

According to Eurostat 2014, the analytical team of Poštová Banka Slovakia discovered that 43% of internet users use their smartphones and tablets as the main internet connection device. As an answer to this trend, most of the e-shops are currently set up to automatically fit and adjust to the interface of phones and tablets, so the consumers can easily navigate through the website on all kinds of devices. Smartphones and tablets became an essential part of e-commerce. Therefore, if the SMEs wish to remain competitive, they have to adapt to this trend as well.

Advantages and Disadvantages of SMEs

The main advantages are:
- Ability to quickly adapt to constantly changing market conditions
- Flexibility
- Lower labor costs
- Direct contact with consumers
- Simple organization structure
- Lower operational and administrative costs
- Better relationships at workplace, closer relationship between employer and employee

The main disadvantages:
- lack of equity and harder conditions to obtain bank loans due to lower confidence in the company
- greater management responsibility
- inadequately defined working positions and workload
- low marketing and advertising budgets

The global importance of e-commerce

The free movement of goods and services within the EU is on one hand a great opportunity for local businesses to go regional or global, but on the other hand it creates very intensive competitive environment, which can be, in the end, devastating. Therefore, all the entrepreneurs
must not only increase quality of their services and lower their prices but also improve their marketing strategy and look for new market opportunities. The V4 countries are very close not only geographically but also historically and economically. The traditions and needs are very similar as well. The improvement of the economical cooperation will lead to great social and economical growth.

One of the steps for reaching such cooperation should be the support of e-commerce. The basis for success in e-commerce is the knowledge of local legislation, overview of current trends in online marketing and the ability to make effective use of ever new electronic tools and platforms. Given the trend of rapid growth of e-commerce, many entrepreneurs are unable to keep up with all the possibilities and changes within the electronic environment. The result is unexploited potential, lagging behind Western countries and jeopardizing own competitiveness and local economy itself. The clear solution is qualitative education and support of entrepreneurs in the e-commerce.

References


Elektronické podnikanie, Wikipedia, https://cs.wikipedia.org/wiki/Elektronick%C3%A9_obchodov%C3%A1n%C3%A9

ITC Communications International Trade Centre (2013), Realising the potential of e-commerce for SMEs, E-commerce in developing countries requires more governmental support to reach its full potential, ITC Executive Director tells WTO workshop, http://www.intracen.org/news/Realising-the-potential-of-e-commerce-for-SMEs/#sthash.tl3QiUZn.dpuf.


Analýza stavu malého a stredného podnikania (2012), www.mhsr.sk/ext_dok-analyza-stavu.../142099c?ext...
Cross-border technology-institutional innovations to address polarisation of EU regions: research outline

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Abstract

In the last decades, there is an ongoing process of regional polarisation in the Central and Eastern Europe. European metropolises are enjoying sharp economic grow and development but other peripheral regions are going through unfavourable development. In Central Europe borders still do matter and many disadvantaged areas are situated in border regions.

At the same time the dominant position of the traditional states as main governmental bodies responsible for a decision making is weakened under the EU multilevel governance and the responsibility for decision making is moving towards other levels of government and non-state stakeholders. Increasing importance of regions, including cross-border relations, is going together with the ongoing process of European integration. But despite great efforts of the European Union through money spent to balance out regional disparities cross-border cooperation in Europe remains behind expectations and border regions remain peripheries from the socioeconomic point of view.

There is a potential for cooperation to enhance regional development, but it seems to be essential to implement innovative approaches within territorial governance based on institutional and technological co-evolution. Such co-evolution should lead to improvement of cooperation between different levels of the government as well as among different stakeholders in designing efficient integration policies of the EU.

The paper represents the research outline and discusses specifics of governance of cross border regions under EU multilevel governance and the role of promising innovative approaches within territorial cross-border governance to promote technology-institutional co-evolution for balanced development between core and peripheral regions in Central and Eastern Europe.

Keywords: Polarisation, cross-border cooperation, multilevel governance, institutional innovation, EU

JEL Classification: O38, H70, R58

Introduction

In 2004, the European Union experienced its largest enlargement. Ten new countries from Central and Eastern Europe become new member states. Almost immediately, the EU Cohesion policy has become the most important regional policy in those states. One of aims of the EU regional policy is to stimulate growth and employment in the least developed regions (EC, 2007). A part of policies is also focused on promoting cross-border cooperation and the development of border areas. Huge amounts of money reallocated through different funds and programmes have been spent for realization of various projects in the poorer European regions to reduce regional disparities and improve opportunities and quality of life of local residents.

With hindsight, it is evident that EU policies fail to reach those goals in the long run. Not only Europe is failing to balance out disparities between regions and state, but these disparities are
becoming ever larger in the last decades. An ongoing process of regional peripheralization is evident in many countries in the Central and Eastern Europe after accession to the EU (Fischer-Tahir, Naumann, 2013). The process of peripheralization is characterised by increasing gaps in development between richer and poorer regions. Richer European regions, usually capital cities and other metropolitan regions, are enjoying sharp economic grow while less developed regions are going through unfavourable development (Lang, 2012).

The peripheralization is not connected only with geographical circumstances and the distance of regions from the centres, but it is closely dependent on other more important factors, such as socioeconomic conditions, demographic and environmental problems, communicative and political power relations (Kühn, 2015). Although within the study of peripherality geographic conditions recede more into the backgroun
d, borders still do matter and many disadvantaged areas are situated in border regions in Central and Eastern borders.

On the other hand, thanks to the reforms undertaken in the new member states in relation to EU cohesion policies an increasing importance of regions can be observed in Europe. Great attention is also paid to the blurring of distinctions between countries through the promotion of European territorial cooperation within European integration policies. Significant political will and support of cross-border regions and their cooperation is present at the EU level. But what is the perception of borders at the level of member states or regions themselves? It is evident that despite great efforts of the European Union through money spent to balance out regional disparities the inter-regional cross-border cooperation in Europe remains behind expectations and border regions remain peripheries from the socioeconomic point of view. Although cross-border cooperation could represents potential for regional development of peripheral border regions.

In Europe players from different levels of government and stakeholders with different interests meets at the formulation of development policies. There are different mixes of stakeholders, the different systems of government and decision-making rules in European regions, which influence the diversification of approaches and policies implemented as well as results arising from them in particular territory.

The paper represents short overview of research outline based on theoretical concepts and it is ordered as follows. At first there is short part devoted to EU multilevel governance and a role of institutions for regional development and cross-border cooperation. The discussion of specifics of governance in cross border regions under EU multilevel governance follows. Paper continues by research questions, goals and methodology and ends by brief conclusions.

**EU multilevel governance**

At the same time with increasing importance of regions, including cross-border relations, the dominant position of the traditional states as main governmental bodies responsible for a decision making is weakened. The responsibility and competencies are not only moved down to regional and local governmental levels but as well as up to the European level (Marks, 1993; Breretor and Temple, 1999; Peters and Pierre, 2001; Hooghe and Marks, 2003; Bache and Flinders, 2004). Not only governmental bodies are involved into the process of decision making but increasingly more often other important non-governmental actors are included into the territorial management (Kooiman, 1993; Rosenau, 1997 Bache, 2010). Thus implementation of European policies is demanding for coordination among all stakeholder involved into management of territories.
The EU multilevel governance is resulting in diversifying powers and interests and potential conflicting situations. It is necessary to identify appropriate mechanisms which would enable to effectively coordinate stakeholders operating under the EU multilevel governance from different tiers of governance and from diversified space for regional development. The coordination among levels of government and with non-governmental stakeholders is well established in old member states in comparison with the new ones. According to Dabrowski (2014) it could be caused by unfavourable institutional arrangement in new EU member states.

**Role of institutions**

Many scholars see institutions as key factors enabling economic development (e.g. North, 1990; Boettke at al., 2008). According to North (1990) institutions represents constrains which are shaping interactions among humans and which reduce uncertainty of everyday decision makings. On the bases of that institutions play important role in human lives, because they can prevent or enable certain ways of behaving. Moreover, it is necessary to take in to account existing institutional arrangements for successful implementation of different policies.

Roland (2008) divides institutions according the time needed to change them in to two groups – fast moving and slow moving institutions. While fast moving institutions such as laws or policies can be changed almost overnight, for change of slow moving institutions like culture, habits or manners much more time is needed. It seems to be essential to innovate existing or accommodate new policies and governance approaches to fit with already existing institutional environments to enhance economic regional development.

Dabrowski (2014) points out that implementation of multilevel governance and involvement of non-state actors can fail due to different institutional and governmental traditions in particular countries. Governments are more centralized in new member states than in western countries as well as usually there are non-collaborative decision-making processes. Both conditions can cause difficulties during designing and implementation of European practices and policies in countries from Central and Eastern Europe.

In general we can expect more challenging situation in border areas where usually two or more different institutional arrangements are facing to each other. Especially in cross-border regions where one of the partners is new member state and other is old member state of the EU.

**Specifics of cross border regions**

The principle of subsidiarity practiced in EU increased importance of regions including cross-border regions. But cross-borders regions have to face many specifics in terms of management of regional development in comparison to interior regions.

Faludi (2012) stressed that there is no formal authority or jurisdiction to govern over the cross-border territory. This implies that it is necessary to establish some artificial structures for decision making about common issues but without legitimate political power in individual states. Thus cross-border organizations of governance which usually represents polycentric governance are facing hierarchical governmental structures at regional or national level. Moreover, very often there is a discrepancy at administrative and political competencies at the same levels of governance. Chilla et al (2012) identified this multilevel mismatch as the most important obstacle of cross border cooperation.
Cross-border cooperation among regions and municipalities cannot be assumed automatically. Border regions dealing with the dilemma whether cooperate or compete with their cross-border partners to strengthen their competitiveness (Giffinger et al, 2005). Borders could be seen as economic opportunities as well as threats and the perception of borders differs at different administrative levels. There is a potential for cooperation within networks of cross-border stakeholders to enhance regional development but there is a necessity of cooperation among expanding range of stakeholders involved in decision-making processes and of building mutual trust among them.

**Research questions and objectives**

It seems to be essential to implement innovative approaches within territorial governance based on institutional and technological co-evolution. Such co-evolution should lead to improvement of cooperation between different levels of government as well as among different stakeholders for designing efficient integration policies of the EU. Thus, the main objective of the research is to identify novel mechanisms which enable successful cooperation between actors from cores and peripheries situated in cross border regions. In addition the research is focused on an assessment of potential of cross-border peripheral regions for co-evolution of institutional and technological innovations and to identify and conceptualize promising innovative governance patterns to promote such co-evolution in model regions. Based on the research objective following research questions are elaborated:

- What elements of multilevel governance are present in cross-border regions in relation to the intensive cooperation between cores and peripheries?
  - What are key factors for intensive cooperation?
  - Who are the key players to be involved for intensive cooperation?
  - What preconditions should be fulfilled for intensive cooperation?
- How can co-evolution of institutional and technological innovations under the multilevel governance of the EU contribute to regional development and regional competitiveness in the model regions?

**Methodology**

The methodology of the research is based on the qualitative methods. The comparative case study approach is designed. Each case study represents one of cross-border regions. The first case study is focused on the Usti nad Labem – Dresden region and the second case study dealing with the Bratislava – Vienna – Brno region. The framework of case studies will be built on the institutional analysis and development framework (IAD) and framework for analysing sustainability of social-ecological systems (SES) developed by E. Ostrom and her colleagues (Ostrom, 2009; Ostrom, McGinnis, 2010).

The research is based on semi-structured interviews with stakeholders from model regions. Respondents represent different levels of government as well as non-state actors dealing with cross-border cooperation. Potential respondents are regional politics, representatives of Euroregions, chamber of commerce, nongovernmental organizations, municipalities, regional and national administrative authorities or other cross-border institutions. It is planned to conduct from 20 to 30 interviews in each case study region, it means 40-60 interviews.
altogether. As a complementary research tool a short electronic questionnaire among mayors of border municipalities is prepared.

Questions for interviews relate to forms of cross border cooperation, problems, obstacles, successes, visions; suitability of national / European policies support to meet regional / municipal desires; identification of key actors in cross-border cooperation; identification of key issues in cross-border cooperation, forms of cooperation with non-state actors and political tools used to increase competitiveness of the region.

Moreover, especially for the research a role board game as an innovative tool for simulation of the process and specifics of decision making process in cross border regions have been developed. Five players play social roles, such as politicians, businessmen or civil society, characterized by diverse short term goals which are designed to impose players into conflicting situations. All players have to follow their long term goal – sustainable management of common pool resource. Players face to dilemma whether to cooperate or compete to gain maximal profit. The aim of the game is to simulate the complexity of cooperation and decision making among different interests groups in the society.

**Conclusions**

Despite huge amount of money invested in Central and Eastern Europe to reduce disparities between east and west and between core and peripheral regions disparities in economic development are accelerating. At the same time new member states are implementing new forms of governance which define new roles of national and regional governments in the process of decision making. Under the EU multilevel governance non-state stakeholders are involved in to the governmental processes. The increasing importance of regions including cross-border regions can be observed in the EU.

All the changes in governmental processes and arrangements require increasing demands on the coordination of multiple interests at different spatial scales. The situation is even more challenging in cross-border regions where more administrative structures and institutional arrangements are present and where informal organizations of cross-border management are facing hierarchical governmental structures.

It seems to be necessary to identify novel mechanisms which enable successful cooperation between actors from the core region and peripheries situated in cross border regions. There is a potential to enhance regional development by co-evolution of institutional and technological innovations in cross-border peripheral regions.

The paper represents the research outline and discusses specifics of governance of cross border regions under EU multilevel governance. In future steps relations of actors in two model regions, their roles in processes of decision making and their ways how to enhance regional development have to be examined using proposed methods in order to identify promising innovative approaches within territorial cross-border governance to promote technology-institutional co-evolution for balanced development between core and peripheral regions in Central and Eastern Europe.
Acknowledgment

The research leading to these results was conducted in the frame of the project “Socio-economic and Political Responses to Regional Polarisation in Central and Eastern Europe” (RegPo²), coordinated by the Leibniz Institute for Regional Geography, Leipzig/ Germany. The project received funding from the People Programme (Marie Curie Actions) of the European Union’s Seventh Framework Programme FP7/2007-2013/ under REA grant agreement n° 607022 and the project SPECTRA+ No. 26240120002 “Centre of Excellence for the Development of Settlement Infrastructure of Knowledge Economy” supported by the Research & Development Operational Programme funded by the ERDF.

References


Supply, demand and price development on the German electricity market during the last 10 years period

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ABSTRACT
Electricity markets in the European Union have gone through significant changes during the last 10 years. Continuing liberalisation of the electricity markets in Europe brings increasing competition and decreasing companies’ profit margins. Market participants are struggling to increase their efficiency which is possible only with a good access to information. At the same time EU energy strategy calls for cleaner electricity markets through further increases in renewable generation share and improving markets efficiency with the projects of smart grids and market coupling. Demand response is presently one of the most crucial issues in the EU electricity markets operation as with lower stability of electricity markets in the future it is important to persuade the customers to shift their consumption to the times when abundance of supply is available. The total volume of the electricity traded on the short-term spot markets gradually increases. At present, the yearly amount of electricity traded on the day-ahead electricity markets in the EU already significantly exceeds 1000 TWh. The shares are very different from country to country - markets considered to be more developed are generally associated with much higher proportions of electricity traded on the spot markets. Rising production from renewable energy sources also highlights the role of spot markets in the future. The aim of this article is the analysis of consequences of these developments particularly in relation to supply, demand and prices from the German electricity market perspective.

Key words:

JEL Classification:

Introduction
The last years have seen a substantial decrease in German wholesale electricity prices. While certain fundamental reasons behind this drop are obvious, many analysts were still surprised by the time period and scope of the decline. At the same time questions regarding trends for the future remained. In this article we look at the electricity market demand and supply changes as the crucial factors affecting wholesale prices of electricity. Electricity price variability and the spread between peak and off-peak prices are the key factors for setting unit utilization and investment decisions by the companies. However, price related trends and patterns have been experiencing important changes recently.

German electricity demand, supply and prices
Most of the reports and forecasts we went through had expected the electricity demand to start recovering during the recent years in Germany. This is in contrast with the real developments observed as electricity consumption has actually continued to further decline every year during the 2010-13 period. The main reason for the lower than expected demand is due to
improvements in electricity usage efficiency. However, average annual electricity consumption decline in 3 years from 2010 to 2013 has been only around 0.8% and therefore sliding demand can’t be considered the main reason for significant price changes on the electricity markets. We expect stable development of demand for electricity also in the future years with German consumption in 2020 to be approximately 1 to 4 percentage points below the 2012 level as shown in Figure 1.

The issue of supply capacity changes is more intriguing. From 2000 until 2009 Germany was adding renewable capacity almost regularly by 2000 MW of wind and 1000 MW of solar capacity annually. This has changed since as solar capacity grew by more than 7000 MW a year during 2009-2012 period, while wind power capacity growth remained approximately unchanged. In 2012 Germany has reached its 2015 targets (stated in the National Renewable Energy Action Plans) regarding wind & sun capacity built and managed to cover approximately 22% of its consumption by renewable generation.

Figure 1.: German electricity demand by year, history and forecast (Data source: entsoe.eu, own analysis)

Figure 2.: Wind & solar capacity by year in Germany
Thus, measuring in terms of electricity produced, Germany has been increasing its renewable generation potential by approximately 10 TWh a year during 2009-12 period. Adding sliding consumption to the picture, approximately 15 TWh less of other than renewable production has been needed every year during the 2009-12 period, which could have increased competition on the German power market significantly.

However, apart from increasing its renewable potential, Germany has also substantially decreased its nuclear output in the recent period. This is summarized in Figure 3, showing that the sum of production with low variable costs, such as renewable and nuclear, actually remained relatively stable during the whole period of 2005-2012. While electricity prices in 2007-2009 were affected by changes in demand and fuel prices, the period of 2010-2012 was relatively stable in these aspects and long-term prices didn’t experience any significant movements during these 3 years.

![Figure 3: Nuclear and Renewable generation in Germany by year (Data source: etsoe.eu)](image1)

2013 and 2014 present a different picture. Nuclear output stays approximately on the level of 2012 while the total production from sources with low variable costs increases sharply as shown in Figure 4. This factor pushes the less efficient traditional thermal generation out of the market, increases competition and causes the electricity prices to decrease.

![Figure 4: Nuclear and Renewable generation in Germany by year, history and forecast (Data source: etsoe.eu, own analysis)](image2)
Moreover, thermal generation decline further affects electricity prices through the lowering fuel costs as demand for coal and gas goes down. Since increases in renewable and decreases in thermal generation in Europe are running ahead of schedule, emission markets are also collapsing. Thus, Figure 4. explains why the price decrease in Germany (and other markets affected) relates to the electricity traded particularly for years 2013 and 2014.

*Figure 4.* also helps to understand what can be expected in the following years. Further significant closures of nuclear capacities in Germany are not planned until 2020, with only 2 plants (both ca 1200 MW) scheduled for closure in 2015 and 2017. With stable increases in renewable capacities even more electricity will be produced from renewable and nuclear sources in 2020 compared to the present situation. While usual opinion is that electricity prices cannot get any lower and should recover soon, the scenario presented here shows that downward push on prices will be significant also during the 2016-2020 period.

**Changes in price patterns during the years**

Generally, spot electricity prices approximately follow the hourly electricity demand movements. (Smolen – Chen) However, in today’s market environment short-term prices are also significantly affected by renewable generation which cannot be regulated and covers large shares of electricity demand during periods of the day. Similarly to drops in consumption, increases in renewable generation also lower the amount of production needed from traditional thermal units.

Thus, to analyse changes in price variability during the recent years, we have looked at the hourly consumption and wind & solar generation in Germany for the average day of the years 2009 and 2012 as shown in Figure 5.

*Figure 5:* German average electricity consumption, including and excluding wind & solar generation, by hour of the day (in MWh), 2012 vs 2009 comparison (Source: entsoe.eu, German TSOs, own analysis)

The curves for average hourly consumption look very similar for both years with peak demand occurring during the mid-day hours between 9 am and 3 pm. However, development of renewable sources in Germany has affected the picture significantly. While in 2009, solar capacity was relatively low and noon hours were still the most challenging part of the day from the perspective of peak generation needed, 2012 presents a different situation. With solar capacity covering on average 15 000 MW of mid-day load, peak units had to be used particularly for evening hours around 7 to 9 pm. These issues clearly affect power prices, which
are already higher during the evening as compared to the mid-day hours and the spread is gradually increasing with advances in solar capacity.

It is also interesting to see the demand response to the lowering midday prices. Power consumption has slightly adjusted, with more of it coming during the midday compared to the evening periods in 2012. While in 2009 there was 3% difference in consumption between noon (11am to 1 pm) and evening (7 to 9 pm) hours, the spread increased to 7% in 2012. We believe this was caused by falling prices during the midday hours as compared to the other periods of the day. Therefore it seems that while electricity demand is inelastic in its nature, certain demand response with change of electricity market fundamentals can be still achieved. We will discuss the issue of demand response on a separate occasion as it is crucial for future power market operation.

Figure 6 summarizes the issue of changing price relations on the market and shows smoothing of the daily electricity prices during the last 6 years in Germany. Mid-day price peak shown for the year 2006 does not arise anymore, with highest prices in year 2012 appearing during evening hours of the day around 8 pm. Spread between peak and off-peak prices also decreases.

![Figure 6: German EEX spot prices (EUR/MWh) by hour of the day average, 2006 – 2012 period.](image)

Further continuation of trends shown might lead to an interesting situation where electricity prices during the day might at one point become on average lower compared to the prices at night. This could lead to redefinition of the whole concept of peak and off-peak prices. (Poyry 2010)

It is further interesting to analyze price variability changes (expressed in standard deviation) year over year as shown in Table 1. As expected, standard deviation in prices in Germany was decreasing from year 2006 until 2011, as the noon price peak gradually disappeared from the market. However, unpredictable renewable generation (particularly wind), from a certain level starts to increase the probability of extreme spot price occurrences (negative prices or prices of more than 100 EUR/MWh). This is the reason why standard deviation in 2012 spot prices increased compared to 2011.
Table 1: German yearly EEX spot prices (EUR/MWh) by hour of the day average, 2006 – 2012 period.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>average (EUR/MWh)</td>
<td>50.8</td>
<td>58.0</td>
<td>65.8</td>
<td>58.9</td>
<td>44.5</td>
<td>51.1</td>
<td>42.6</td>
</tr>
<tr>
<td>st. deviation (EUR/MWh)</td>
<td>49.1</td>
<td>50.3</td>
<td>28.6</td>
<td>19.4</td>
<td>14.0</td>
<td>13.5</td>
<td>12.7</td>
</tr>
<tr>
<td>st. deviation (%)</td>
<td>97.3%</td>
<td>79.9%</td>
<td>43.5%</td>
<td>49.9%</td>
<td>31.4%</td>
<td>26.5%</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Conclusion

Analysis presented has important implications for investment decisions of companies and utilization of peak power units. Based on 2006-2011 data it is becoming relatively more profitable to invest in the base-load units rather than peak-load ones, while utilization of most of the existing gas turbines and pumping storages becomes limited to only the most profitable periods of the year. However, 2012 data already point to a different trend.

We expect that in the following years, price variability will start to increase again with spot prices becoming less and less predictable in the medium-term. If the price formation mechanism remains unchanged, in 10 years it is expected that most of the hourly electricity prices will be either higher than 100 EUR/MWh or lower than 0 EUR/MWh. Hence, companies can already start preparing for the renaissance of peak power units relevance.

References


MOLLER CH. Ballancing energy in the German market design, [online], Dissertation, University of Karlsruhe, 2010, [cit. 27.2.2013], Available at: http://digbib.ubka.uni-karlsruhe.de/volltexte/documents/1413686

The Impact of Investment Portfolio of Insurance Companies on their Profit

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Abstract

Slovak insurance sector underwent a dynamic development during last two decades. A long history of property insurance was caused by the political system before 1989 and was later replaced by life insurance sub sector during the 90s. Along with this form of insurance, the insurance integration into financial market started and allowed the insurance companies to evaluate admitted capital of clients. The aim of this article is to monitor the relation between profit of insurance companies and components of financial assets owned by them. This relation will be described by regression model, which aims to determine significant variables affecting the profit of these companies. The underlying model data will be chosen from balance sheet and income statements of 15 Slovakia-based insurance companies from the time period 2009 to 2014. The results of this research contribute to a better understanding of the importance of certain types of financial assets owned by insurance companies, and thus help improve the legislative management of insurance companies in Slovakia.

Keywords: insurance companies, assets, composition of assets, financial revenues

JEL Classification: G22

Introduction

An insurance business has become one of the most important branches of national economy. The main task of insurance companies is to protect individuals and society from unwanted circumstances. Drugdová (2012) In the event that this unwanted circumstance occurs, the insurance companies pay compensation - insurance - to the insured. Insurance company’s pay for this compensation is fixed premium. Insurance is therefore a liability of insurer to the insured person paid at the unknown time. Saundlers et al. (2008)

This liability has form of technical reserves, which are authorized by law, but also strictly regulated and controlled, and its forms and limits are stated in national decrees about creation, placement and use of technical reserves funds. Meheš and Bričová (2011)

All insurance companies, providing life and non-life insurance, have in common that the resources obtained through contracts with the customers are mainly long-term. Thanks to the predictability of contracts with regular installment payments, insurance companies do not have to keep a high volume of liquid assets, and thus invest free liquidity in less liquid financial instruments. Polouček (2009) Insurance corporations providing life insurance have mostly corporate and government bonds with a maturity of over one year and mortgage bonds in portfolio that are not very liquid. A high proportion of debt securities exposed these companies to inflation risks. Papík (2015)

Insurance corporations providing non-life insurance pay the insurance mostly unpredictably. These financial institutions are trying to minimize the risk at the moment of signing the contract, which is reflected in the amount of fees paid by clients and in services these corporations
provide. Henebry and Diamond (1998) Therefore, insurance companies focused on non-life insurance prefer more liquid assets. Important portion of the financial assets consists of deposits in bank accounts and financial assets available for sale. Papík (2015)

The Aim of the Article

The aim of the research is to analyze composition of insurance companies’ investment portfolio in Slovakia. This information allows easier monitoring the trends in preferred financial instruments and their classification under IFRS. For this purpose, data were collected from balance sheets, income statements and notes of 15 Slovak insurance companies.

These data became input data for linear regression model, which monitors relationship between percentage of the various financial instruments and profits of insurance companies. The outcome of this research is making clear to what extent financial instruments contribute to making profit of insurance companies, which of these instruments are most effective in it and last but not least it is creating regression model describing the relationship between them.

Methodology

Relationship between insurance companies’ profits and individual parts of their financial assets is described by linear regression model, the main task of which is to identify significant variables that have influence on profit of these companies.

As input data for this regression model were used selected items from balance sheets, income statements and notes of 15 Slovakia insurance companies. These data were collected from 2009 to 2014.

Studied regression model (1) has the following form:

\[ \text{PROFIT} = \sum_{i=1}^{m} a_i \times FVTPL_i + \sum_{j=1}^{n} b_j \times AFS_j + \sum_{k=1}^{o} c_k \times HTM_k + d_i \times \text{LOANS} \]  

where \( FVTPL_i \) represents all financial instruments at fair value through profit or loss such as bonds at FVTPL, units in mutual funds, derivatives and employee shares. Under the variable \( AFS_j \) are included all financial instruments classified as available for sale and measured at fair value in the balance sheet. Among these instruments belong bonds at AFS, stocks and collateralized debt obligations (CDO). As \( HTM_k \) are classified all financial instruments, which have fixed duration and can be held to maturity, in particular bonds. Last independent variable is \( \text{LOANS} \) representing loans, receivables, deposits at bank and cash equivalents, owned by insurance companies.

Dependent variable of this model is \( \text{PROFIT} \), which represents insurance companies’ total comprehensive gains for particular year. All variables were expressed as ratio of the volume of the insurance company’s total assets.

Financial Assets of Insurance Companies

"The assets of an entity are a result of past events which increase economic benefits of an entity in the future and can be reliably recognized in the financial statements on the balance sheet." Olvecká (2014) Insurance companies adapt financial assets to the character of this liability in
order to fulfil their duties towards clients. Financial assets constitute the largest part of insurance companies’ assets. Financial investments usually form around 81 % of insurance companies’ total assets in average.

The most common financial assets in insurance companies are debt securities, government and corporate fixed bonds. Over 60 % of assets are created just by these securities. These financial instruments are used especially in life insurance thanks to regular payments, low volatility and their long term character. In the last years, it is possible to observe the trend of increasing volume units in mutual funds. Over the last six years, the amount of these assets increased by about 2 % in insurance companies. Other financial instruments such as stocks, cash, current account, term deposit, derivatives etc. constitute about 10 % of insurance companies’ total assets in average.

Table 1: Insurance companies’ financial assets during 2009 – 2014

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total financial instruments</td>
<td>82.30%</td>
<td>82.25%</td>
<td>81.38%</td>
<td>82.42%</td>
<td>81.68%</td>
<td>81.94%</td>
</tr>
<tr>
<td>Debt securities</td>
<td>60.38%</td>
<td>60.71%</td>
<td>61.09%</td>
<td>61.06%</td>
<td>61.53%</td>
<td>61.16%</td>
</tr>
<tr>
<td>Stocks</td>
<td>0.84%</td>
<td>0.73%</td>
<td>0.86%</td>
<td>0.90%</td>
<td>0.95%</td>
<td>1.37%</td>
</tr>
<tr>
<td>Unit in mutual funds</td>
<td>8.86%</td>
<td>10.03%</td>
<td>9.50%</td>
<td>9.82%</td>
<td>10.02%</td>
<td>10.93%</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1.97%</td>
<td>2.19%</td>
<td>1.30%</td>
<td>3.28%</td>
<td>1.96%</td>
<td>2.37%</td>
</tr>
<tr>
<td>Term deposit</td>
<td>1.51%</td>
<td>1.01%</td>
<td>1.36%</td>
<td>0.98%</td>
<td>1.13%</td>
<td>1.15%</td>
</tr>
<tr>
<td>Other financial instruments</td>
<td>7.47%</td>
<td>6.31%</td>
<td>6.08%</td>
<td>5.41%</td>
<td>5.47%</td>
<td>4.37%</td>
</tr>
</tbody>
</table>

For purposes of accounting, the financial instruments are classified according to the aim for which the assets were acquired. International accounting standards (IAS 39) provides basic classification of financial instruments:

- at fair value through profit or loss (FVTPL) - are securities that were acquired for the purpose of trading and profit arising from changes in market prices in the short term,
- held to maturity (HTM) - are securities that are acquired with the intention and ability to be held to maturity, Schwarzová (2009)
- available for sale (AFS) - are securities that cannot be classified as the securities at fair value through profit or loss or the securities held to maturity,
- loans and receivables - are financial assets that are not listed on any financial market, the amount of the payment is fixed or variable in nature. Staričková (2014)

Following enlargement of table 1 by the accounts classification provides more detailed view on owned assets. The largest volume of financial instruments are classified as held for sale. 37-45 % of the insurance companies’ property acquired during last six months belong to this category. Dominant part of this category constitute debt securities. Debt securities are also the only component of the held to maturity category. This category has the second largest percentage composition in the long-term.

Table 2: Insurance companies’ financial assets during 2009 – 2014 according to IAS 39

<table>
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</thead>
<tbody>
<tr>
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<td>81.38%</td>
<td>82.42%</td>
<td>81.68%</td>
<td>81.94%</td>
</tr>
<tr>
<td>At fair value through profit or loss (FVTPL)</td>
<td>8.40%</td>
<td>10.12%</td>
<td>10.32%</td>
<td>11.38%</td>
<td>12.18%</td>
<td>13.02%</td>
</tr>
</tbody>
</table>
The graphic representation of the output provides a clearer image of the trends in the development of individual groups of financial assets. Although the volume of debt securities in insurance companies’ portfolios doesn’t change fundamentally (it is about 61% each year), thanks to IAS 39 the decrease of bonds held to maturity and their replacement by bonds available for sale can be observed. Gradual transfer from one category to the other represents about 8% of total assets for the time period 2009 to 2014. This trend is caused mainly by a decrease of interest rates that affects yield curve shifts. The value of bonds held to maturity will not change, when the yield curve shifts are decreased. In case of bonds available for sale, the decrease of yield curve cause an increased value of these kinds of securities, which also increases the portfolio value. Malik (2013), Because of the decrease of interest rates, on financial markets during last few years, insurance companies decided to use this condition to increase the portfolios’ value and their extend about debt securities available for sale. These trends are recorded in the table 2 and also in figure 1.

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
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<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt securities (FVTPL)</td>
<td>0.92%</td>
<td>1.40%</td>
<td>1.73%</td>
<td>2.00%</td>
<td>2.30%</td>
<td>2.51%</td>
</tr>
<tr>
<td>Units in mutual funds (FVTPL)</td>
<td>7.47%</td>
<td>8.70%</td>
<td>8.58%</td>
<td>9.33%</td>
<td>9.82%</td>
<td>10.45%</td>
</tr>
<tr>
<td>Derivatives (FVTPL)</td>
<td>-0.01%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Employee stocks (FVTPL)</td>
<td>0.02%</td>
<td>0.02%</td>
<td>0.02%</td>
<td>0.04%</td>
<td>0.06%</td>
<td>0.06%</td>
</tr>
<tr>
<td>Held to maturity (HTM)</td>
<td>24.41%</td>
<td>22.79%</td>
<td>23.19%</td>
<td>21.94%</td>
<td>19.66%</td>
<td>15.99%</td>
</tr>
<tr>
<td>Debt securities (HTM)</td>
<td>24.41%</td>
<td>22.79%</td>
<td>23.19%</td>
<td>21.94%</td>
<td>19.64%</td>
<td>15.99%</td>
</tr>
<tr>
<td>Available for sale (AFS)</td>
<td>37.42%</td>
<td>38.73%</td>
<td>37.96%</td>
<td>38.50%</td>
<td>41.22%</td>
<td>45.01%</td>
</tr>
<tr>
<td>Debt securities (AFS)</td>
<td>35.03%</td>
<td>36.53%</td>
<td>36.17%</td>
<td>37.11%</td>
<td>39.59%</td>
<td>42.66%</td>
</tr>
<tr>
<td>Units in mutual funds (AFS)</td>
<td>1.38%</td>
<td>1.33%</td>
<td>0.92%</td>
<td>0.48%</td>
<td>0.20%</td>
<td>0.48%</td>
</tr>
<tr>
<td>Stocks (AFS)</td>
<td>0.84%</td>
<td>0.73%</td>
<td>0.86%</td>
<td>0.90%</td>
<td>0.95%</td>
<td>1.37%</td>
</tr>
<tr>
<td>CDO (AFS)</td>
<td>0.03%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>10.79%</td>
<td>9.34%</td>
<td>8.71%</td>
<td>9.63%</td>
<td>8.00%</td>
<td>7.33%</td>
</tr>
</tbody>
</table>

Fig. 1 Insurance companies’ financial assets during 2009 – 2014 according IAS 39
Similar situation is also in case of loans and receivables, decreasing volume of which was caused by decrease of interest rates and an effort to find an alternative investment opportunities. They partially emerged on the collective investment market, since investors took the opportunity to lower the value of units of mutual funds after the crisis and they started buying these assets.

Financial Revenues and Profits of Insurance Companies

“The Act on Accounting 431/2002 in Slovakia defines revenues as increases in economic benefits during an entity’s financial year, which can be measured reliably.” Kajanová (2014) According to another definition, the assets increase of the entity results from the implementation of its performance. Šostronková, M. and Kajanová, J. (2009) According to IAS 18, revenues include those activities that result in the gross inflow of economic benefits (cash, receivables, other assets) arising from the ordinary operating activities of an entity (such as sales of goods, sales of services, interest, royalties, and dividends).

For the purpose of research data related to revenues and profits of individual insurance companies were collected. In the studied variables were included profit or loss before tax, total comprehensive gains and total revenues from financial investments. Profit or loss before tax, total comprehensive gains and total revenues from financial investments were analyzed as ratio of the volume of total insurance companies’ assets in table 3.

Total revenues from the financial investment include for example gains from unrealized revaluation at fair value, gains from revaluation of financial assets available for sale, dividends and interest revenues. Total revenues from financial investments were studied in proportion to the volume of total assets, total revenues and to total financial assets. Ratio to total financial assets can be interpreted as annual revenues from financial assets.

Table 3: Insurance companies’ revenues and profits during 2009 – 2014

<table>
<thead>
<tr>
<th>Ratio</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues from financial investments / total assets</td>
<td>3.86%</td>
<td>3.73%</td>
<td>2.20%</td>
<td>4.15%</td>
<td>3.21%</td>
<td>3.84%</td>
</tr>
<tr>
<td>Profit or loss before taxes / total assets</td>
<td>3.14%</td>
<td>2.77%</td>
<td>3.98%</td>
<td>2.60%</td>
<td>3.02%</td>
<td>3.10%</td>
</tr>
<tr>
<td>Total comprehensive gains / total assets</td>
<td>3.05%</td>
<td>2.37%</td>
<td>1.96%</td>
<td>4.96%</td>
<td>2.25%</td>
<td>4.04%</td>
</tr>
<tr>
<td>Total revenues from financial investments / total assets</td>
<td>4.76%</td>
<td>4.60%</td>
<td>2.74%</td>
<td>5.09%</td>
<td>3.97%</td>
<td>4.72%</td>
</tr>
<tr>
<td>Total revenues from financial investments / total revenues</td>
<td>12.24%</td>
<td>12.07%</td>
<td>7.90%</td>
<td>12.61%</td>
<td>10.83%</td>
<td>12.35%</td>
</tr>
</tbody>
</table>

As is obvious in historical development of these variables, revenues and profits of insurance companies are stable year by year. The only exception is year 2011, when total revenues from financial investments reached their lowest level. This was due to significantly negative revaluation differences of debt and equity securities.

Linear Regression Model for Insurance Companies

As Table 3 shows, the total revenues from financial investments represented in average about 11% of insurance companies’ total revenues. Because revenues from financial investments
represent only a small proportion of total revenues, their impact on the profit or loss is very low. For this reason, the original model (1) was modified and rather than dependent variable \( \text{PROFIT} \) new dependent variable, revenues from financial investments \( \text{REVENUES} \), was used. New model (2) has the following form

\[
\text{REVENUES} = \sum_{i=1}^{m} a_i \times \text{FVTPL}_i + \sum_{j=1}^{n} b_j \times \text{AFS}_j + \sum_{k=1}^{o} c_k \times \text{HTM}_k + d_l \times \text{LOANS} \tag{2}
\]

Independent variables were unchanged in contrast to the original model (1).

Of all of tested models, the best results were achieved by model, consisting of mutual funds at fair value through profit or loss, debt securities available for sale and debt securities held to maturity. According to the model, these three components of assets have significant influence on total revenues from financial investments of Slovak insurance companies.

List of significant model variables calculated in statistic program R, as well as estimated model coefficients, standard errors, t-values and p-values are specified in following part. Field, Miles and Field (2012) It is obvious that p-value is lower than 0.005 in all these variables.

\textit{Call:}

\texttt{lm(formula = PP$REVENUES ~ PP$FVTPL_FUNDS + PP$AFS_BONDS + PP$HTM_BONDS + 0)}

\textbf{Coefficients:}

|                              | Estimate | Std. Error | t value | Pr(>|t|) |
|------------------------------|----------|------------|---------|----------|
| PP$FVTPL_FUNDS              | 0.074920 | 0.008431   | 8.886   | 7.69e-14 *** |
| PP$AFS_BONDS                | 0.041937 | 0.005804   | 7.226   | 1.80e-10 *** |
| PP$HTM_BONDS                | 0.056159 | 0.009321   | 6.025   | 3.96e-08 *** |

\[ \text{Residual standard error: 0.01836 on 87 degrees of freedom} \]

\[ \text{Multiple R-squared: 0.8057, Adjusted R-squared: 0.799} \]

\[ \text{F-statistic: 120.3 on 3 and 87 DF, p-value: < 2.2e-16} \]

This model brings similar results analyzing variance (ANOVA), which confirms the results of linear regression model (2). P-value was lower than 0.005 in all three cases of independent variables of linear regression model.

\textit{Analysis of variance (ANOVA)}

\textit{Response: PP$ REVENUES}

<table>
<thead>
<tr>
<th></th>
<th>Sum Sq</th>
<th>Df</th>
<th>F value</th>
<th>Pr(&gt;F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP$FVTPL_FUNDS</td>
<td>0.026615</td>
<td>1</td>
<td>78.960</td>
<td>7.689e-14 ***</td>
</tr>
<tr>
<td>PP$AFS_BONDS</td>
<td>0.017600</td>
<td>1</td>
<td>52.216</td>
<td>1.798e-10 ***</td>
</tr>
<tr>
<td>PP$HTM_BONDS</td>
<td>0.012235</td>
<td>1</td>
<td>36.298</td>
<td>3.963e-08 ***</td>
</tr>
<tr>
<td>Residuals</td>
<td>0.029325</td>
<td>87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \text{Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1} \]

Characteristics of created model are shown in figure 2. From Residuals vs. Fitted part of this picture it is possible to see that model is probably slightly heteroscedastic. Next characteristic of created model is that there are light tails, which cause higher kurtosis of created model compared to normal distribution. In other aspects, the model fits data correctly.
characteristics’ graphs (Residuals vs. Fitted, Normal Q-Q, Scale-Location, Residuals vs Leverage)

During the additional testing, the heteroscedasticity wasn’t confirmed by Goldfield-Quandt test. Null hypothesis about homoscedasticity of the model was accepted, because p-value is higher than 0.005.

Goldfeld-Quandt test

data: PPSREVENUES ~ PPSFVTPL_FUNDS + PPSAFS_BONDS + PPSHTM_BONDS + 0
GQ = 1.1384, df1 = 40, df2 = 40, p-value = 0.3419

As is obvious from created model, financial assets, which insurance companies own in the largest volumes, have the greatest influence on making revenues from financial investments. The exception are loans and receivables, significant influence on making revenues from financial investments of which wasn't shown despite their large volumetric representation in
insurance companies’ portfolios. The final model (3), which estimates revenues from financial
investments, has the following form

\[ \text{REVENUES} = 0.0749 \times FVTPL_{\text{Mutual funds}} + 0.0419 \times AFS_{\text{Bonds}} + 0.0561 \times HTM_{\text{Bonds}} \quad (3) \]

where \( FVTPL_{\text{Mutual funds}} \) are units in mutual funds at fair value through profit or loss, \( AFS_{\text{Bonds}} \) are debt securities available for sale and \( HTM_{\text{Bonds}} \) are debt securities held to maturity.

**Conclusion**

The volume of financial assets, which are owned by Slovakia insurance companies, apparently
did not change significantly in the period 2009 to 2014. The main component of financial
assets of these companies are debt securities, which contain about 61% of portfolio composition
regularly. In this period we can observe the trend of increasing units in mutual funds, and in
case of insurance companies the amount of them increased by about 2% to almost 11%.

When insight at financial assets in accordance with International Accounting Standard IAS 39
in more detail, it is possible to see some development in insurance companies’ behavior. Debt
securities held to maturity were replaced by debt securities available for sale. This change was
realized in 8% during observed period. This trend is due to decreased yield curves in Europe.

Second trend is the decreasing of financial assets in category Loans and receivables, which also
contains of cash, term deposits, loans and receivables. Units of this category were replaced by
mutual funds at fair value through profit or loss. The reason for it are low interest rates on
money market in last few years.

Analysis of revenues brings information that revenues from financial investments regularly
constitute about 12% of total revenues. Revenues from financial assets have a very small impact
on total comprehensive gains of insurance companies.

Research has shown that there is a linear relationship between revenues from financial
investments and percentage ratio units in mutual funds at fair value through profit or loss, debt
securities available for sale and debt securities held to maturity, to total assets of insurance
companies. Units in mutual funds at fair value through profit or loss have the largest influence
on making revenues from these three variables. This model also provides important
information, namely that loans and receivable, as term deposits and cash equivalents, don't
contribute to making of revenues in significant way. The created model allows to estimate
potential revenues from financial investments that can be possibly gained by Slovak insurance
companies having specifically composed financial assets portfolio.

The created model provides basic framework, which provides a base for next research.
Although Goldfield-Quandt test didn't confirm hypothesis about heteroscedasticity, some
results suggest small reserves in the present model. By removal of outliers from input data, by
logarithmic expression of variables or analyzing only insurance companies, market
capitalization of which reached certain level, the model can be set up and further optimized
achieving even more interesting results.
References


Zákon č. 431/2002 Z. z. o účtovníctve v znení neskorších predpisov
The influence of Employee Skills and Knowledge from the Perspective of Managers
(Case of Bratislava Region)

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Abstract
The objective of the paper was to present the managers’ views on employees’ skills and competences in the selected region. The sample included organisations in the service sector in Bratislava region. Questionnaires were used to carry out the survey and the results were processed in the application of Excel and their interpretation was based on descriptive statistics.

Keywords: employee development, skills, knowledge, human resource management

JEL Classification: M12

Introduction
Human resource management (HRM) is a key element of the organisation. HRM affects the most important resource of the organisation, namely employees. Employee development and training activities are among the most common and costly HR activities. Employees must manage resources in order to minimize inputs and maximize outputs. In this context formal education and development affect the performance and motivation of employee, which are satisfied with their own work and support their fulfilment. Training and development teach new skills, refine existing skills and affect employee attitudes.

Hollenbeck and Wight defined knowledge as factual or procedural information that is necessary for successfully performing a task. A skill is an individual’s level of proficiency at performing a particular task. (Hollenbeck N., Wright G., 2003). They also defined development as acquisition of knowledge, skills and behavior that improve employees to meet changes in workplace requirements and in clients demands in the future, therefore development is future-oriented. That said, development is not necessarily related to employees’ current workplace. While, traditionally, training helps employees’ performance in current workplace. (Hollenbeck N., Wright G., 2003). Training is a systematic process to foster the acquisition of skills, rules, concepts or attitudes that result in an improved match between employee characteristics and employment requirements.
Development is the long-term process of enhancing employee capabilities and motivation to make them valuable future members of the organisation. Development includes not only training but also careers and other experiences.
Employee development is one of the core activities of personnel departments. Very often, however, investment in human resource development in organisations perceive solely as costs, primarily because many organisations do not measure, and hence do not show the contribution of training and development of their employees to the organisations performance. (Milkovich G., Bourdreau J., 2002)
Harrison R. (1993) states that employee development is a part of the overall strategy of the organisation and human resources become a valuable source to the organisation performance. The required organisation performance is achieved employee’s abilities, knowledge, skills, and commitment in every job level. Employee development must be in terms of strategies aligned with the vision, mission and goals of the organisation. Training and development is competitiveness and are a powerful means to enhance the efficiency and equity of the organisation.

Methodology

The research was aimed to determine the importance of selected methods of employees’ skills and knowledge. The starting point for the paper was primarily studying the domestic and foreign literature related to skills and knowledge of employees. The next step was based on the acquired knowledge to create a questionnaire and carry out a questionnaire survey to obtain data needed for analysis. Questionnaires were designed for managers of the selected organisations. The obtained data were processed, analysed and evaluated. The final step was to summarize data on employee skills and knowledge in selected organisations in the Bratislava region.

The collection of data was conducted by a survey. The questionnaire is a tool used mainly for mass and relatively quick survey about knowledge, attitudes or opinions of those questioned for the actual or potential reality. Questionnaire collection method was the most appropriate tool for the actual analysis addressed 118 organisations. The rate was nearly 48%, which means we obtained completed and returned questionnaires from 56 organisations. The research was realized by e-mail and telephone communications. The questionnaire was sent electronically by e-mail within April 1st to August 28th 2014. Organisations were categorized according to three criteria: size, business activity and the percentage of university graduates. Categorizations were used in order to identify differences or correlation between selected skills and knowledge of employees in surveyed organisations.

Discussion and result

The objective of the research is the identification of importance of employees’ skills employees in Bratislava region. From the perspective of managerial skills needed to improve performance of the organisation we examined the following skills: management and organisational skills, creativity, teamwork skills, foreign languages, IT skills, vocational skills (skills used in a given business sector), and communication skills.

The selected subjects of the study are organisations providing services, namely, the sample consisted of 20 organisations from the IT field, 6 organisations from financial services, 15 organisations involved in design and 7 personal agencies. This categorization was done according to the NACE. Another categorization of the sample resulted from the size of the organisation. The organisations were divided into small organisations (up to 49 employees) represented by 32 organisations, medium-sized organisations (50-249 employees) represented by 15 organisations and large organisations (over 250 employees) represented by 9
organisations. In addition, the organisations were categorized by the percentage of university-graduates out of the total number of employees.

The categorization by the percentage of university graduates was divided to organisations with less than 75% of university graduates and those with more than 75% of university graduates. This division was done due to the need to create two roughly equal size groups.

In the study, 118 organisations were contacted. The return rate was nearly 48%, which meant completed and returned questionnaires from 56 organisations. The organisations were contacted via e-mail and telephone. The questionnaire was sent electronically in April through August 2014. The organisations were categorized by the three criteria mentioned above (size, business activity and the percentage of university graduates) so that differences and correlation in application of specific employees’ skills and knowledge in the selected organisations could be identified.

The first question was to identify the importance of the skills needed for performance improvement of the organisations from the perspective of the manager. Respondents were asked to evaluate options on a scale from 0 to 3, where 0 represented irrelevant for the organisation, 1 – partially important 2 - important and 3 - very important skill. The skills were as follows: management organisational skills, creativity, teamwork skills, foreign languages, IT skills, vocational skills (skills used in a given business).

In this section, we present the analysis of the findings collected in the questionnaire survey. Subchapters are divided by the areas of inquiry, taking into account the above mentioned categorization of the sample, and the breakdown of organisations by size, business and the number of university graduates. The results are presented in graphs with appropriate description and interpretation.

Figure 1. The importance of skills in improving organisational performance by business
Figure 1 shows that the managers of the examined sample consider professional skills and managerial and organisational skills to be more important for improvement of the performance of the organisation. On the contrary, they considered foreign languages and IT skills to be the least important.

Due to the categorization by business, organisations in financial services consider team work and communication skills to be the most important skills followed by professional skills and managerial and organisational skills. Least important were Generally IT skills were regarded IT least important together with foreign languages. Managers’ recruitment agencies considered foreign languages to be least important and managerial and organisational skills to be most important. IT organisations considered foreign languages to be least important, other options were of relatively equal importance (they occurred in the interval 2.60 to 2.80). Organisations providing services in design considered IT skills to be least important and creativity the most important. For organisations providing management consulting communication skills together with professional skills were the most important, and IT skills were considered least important. The management consulting services considered communication skills to be the most important (average value 3.00). The lowest average value (2.33) in these skills was attached by organisations providing services in design.

The organisations in design attached the highest importance to creativity (2.86), which came as a surprise to us, but the organisations providing management consulting weighed it a bit higher (2.87), however, the difference is small. The lowest valued was creativity (2.50), which came from organisations providing financial services.

**Teamwork skills** are least valued in organisations providing management consulting (2.65) while the most valued in organisations that worked on the financial services (3.00).

**Foreign languages** were least valued by all organisations. This skill was rated highest among organisations providing management consulting (2.65) and least (2.00) by IT organisations.

On the contrary, **professional skills** were valued the highest by all organisations, the lowest average score (2.66) was attached by organisations providing services in design and the highest by organisations engaged in management consultancy (3.00).

The penultimate importance among the skills to enhance the performance of organisations was attached to **IT skills**. The highest importance was, logically, attached by IT organisations, namely (2.75), and the lowest (1.86) by organisations providing services in design. The last option considered included **managerial organisational skills**. The lowest average weight (2.60) was attached by organisations providing IT services, while the highest average weight (3.00) by recruitment agencies.
As comes from Figure 2 the highest average weight (2.93) was attached to professional skills by medium-sized organisations, the lowest (2.00) to foreign languages by large organisations.

With regard to the categorization by enterprise size, for large organisations communication skills are most important (2.77), closely followed by IT skills, professional skills and managerial organisational skills (2.66); on the other hand, foreign languages are least (2.00), followed by teamwork and creativity (2.33 and 2.44 respectively).

For medium-sized organisations professional skills (2.93) are the most important, closely followed by teamwork and managerial organisational skills (both 2.80). Here, foreign languages were attached the lowest weight (2.4), followed with larger gap by communication skills and IT skills (both 2.66).

For small organisations creativity (2.84), professional skills and teamwork skills (both 2.78) are the most important skills. In small organisations, foreign languages (2.09), communication skills (2.56) and IT skills (2.25) scored the lowest average weight.

He smallest difference between the highest and lowest average weight attached by the organisations categorized by size appeared in communication skills (0.21). Similarly, a small deviation was recorded also in professional skills (0.27). It follows that impact of these two options was less significant for organisations. Conversely, the largest difference (0.47) was identified in teamwork skills. Similarly, a significant difference was found in foreign languages (0.40).

Large organisations consider communication skills (2.77) to be the most important. The lowest average weight of communication skills was attached by small organisations (2.56).
It came as a surprise that *IT skills* were attached the lowest average weight (2.25) by small organisations. On the contrary, *IT skills* are equally important for medium and large organisations (2.66).

Professional skills acquired the highest rating in all four categories of organisations, and they were considered most important by medium-sized enterprises (2.93).

The average weight of *foreign language skills* (2.40) was somewhat surprising in the case of medium sized organisations, while foreign languages were attached lower mean weight (2.09, 2.00 respectively) by small and large organisations.

*Teamwork skills* were most valued by medium-sized (2.93) and small (2.78) organisations. In large organisations, also surprisingly, teamwork skills were assessed relatively low (2.33).

*Creativity* was attached the lowest weight by large organisations (2.33). This is an interesting difference with the highest value (2.83) attached by small organisations.

*Managerial organisational skills* reached the highest score in the medium-sized organisations (2.8). Managerial organisational skills were valued lowest by large organisations (2.66), and only a little above the average value by small organisations (2.68).

As comes from Figure 1, foreign languages gained the lowest weight in all three categories of organisations by size, although the medium-sized organisations valued them more than large and small organisations.

![Figure 3. The importance of skills in improving the organisation's performance according to the number of university graduates](image-url)
Figure 3 shows that the average values of the individual skills’ importance were almost always higher in organisations with the number of university graduates exceeding 75%. The only exception are IT skills, which came out slightly above average in the organisations that employ less university graduates than 75%. However, there are cases where skills are rated significantly higher in companies that employ over 75% university graduates than in those organisations that employ university graduates under 75%. The biggest difference in foreign languages was the difference of 0.59 between the maximum and minimum average value. Foreign languages are closely followed by communication skills with the second largest difference of 0.46.

*Professional skills, teamwork skills, creativity and managerial organisational skills* show about the same differences between organisations classified according to the number of university graduates. The difference in creativity reached 0.17. *Teamwork skills* gap reached 0.16. *Professional skills* and *managerial organisational skills* exercise lower disparity, where the difference in the importance of professional skills accounts for 0.12.

The analysis shows that the surveyed organisations consider namely professional skills to be the most important for improving the performance of organisation with the average value 2.83 for the whole sample. Maximum value 3 shows that professional skills are very important. These skills are actually needed for professional work in the sector and it is logical that they achieved the highest rating. Managerial and organisational skills reached the second position (2.77) in the whole sample. As comes from the findings, organisations are aware of the importance of quality management and the importance of organising training programs. The value is approaching the level of very important. The surveyed organisations attached the least weight to foreign languages. The average value reached 2.23, which represents a level of almost important value. The result is relatively surprising. Bratislava region was studied and other skills were expected to come as least important (such as IT skills, creativity, teamwork skills and communication skills), but not foreign languages. It is a question why organisations facing globalization do not attach importance to these competences. It is necessary to point out, however, that even the lowest recorded weight is still relatively high, and all skills are in the range from 2.23 to 2.83.

<table>
<thead>
<tr>
<th>Total sample</th>
<th>Managerial organisational skills</th>
<th>Creativity</th>
<th>Teamwork skills</th>
<th>Foreign languages</th>
<th>Professional skills</th>
<th>IT skills</th>
<th>Communication skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.77</td>
<td>2.73</td>
<td>2.75</td>
<td>2.23</td>
<td>2.83</td>
<td>2.43</td>
<td>2.69</td>
</tr>
</tbody>
</table>

**Conclusion**

56 organisations were studied in the Bratislava region, where we collected the necessary data using questionnaire method. The questionnaire was filled by the managers of the organisations. Managers pointed out that the individual skills are very important to organisational performance.

Today, however, employers should view assess their employees’ skills and knowledge consistently. Recent graduates cannot be expected to be prepared for the actual requirements of practice. Rather, they should focus on developing their creativity, their ability to understand the problems associated with the development of abstract and conceptual thinking and overall faster with their abilities to learn, create, to understand the context, etc. This is one of the ways to build up the potential of the organisation and establish a long-term competitive advantage with competent and loyal employees. Such employees can afford to come up with ideas that can help
the organisation, because they have the necessary knowledge and skills to apply this knowledge, to modify and enhance the benefit of the organisation. In fact, it is the intention of the European Union to create a knowledge society, where knowledge employees are the organisation’s most valuable asset.

References


Marketing of politics and its influence on voting behavior

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Abstract
Article deals with the influence of political marketing on the behavior of voters. The author draws on real examples of influencing voters in the current politics, systematize information about why and how marketing affects political behavior of voters. Points out also which one what modern communication tools are used in political marketing and what are, in terms of political parties and their leaders, effective and efficient and how to reach and obtain the greatest number of voters. Today effective strategy, interim analyzes, research of preferences and addressable communication with voters are most used tools that allow not only to establish the preferences of voters but also to change mindsets of voters use their attitudes and opinions to benefit from marketing strategies. The aim is to characterize and examine the impact of political marketing on the behavior of voters in Slovakia on the background of existing political marketing theory and own research and compare it to existing research studies voting behavior. Author will use and evaluate scientific studies and research the subject on the agenda to analyze the available data. The contribution will be used statistical, sociological and marketing data and findings from research carried out by their own.

Keywords: political marketing, political stakeholders, strategy, voters.

JEL classification: M31 Marketing

Introduction
Political marketing is about how political elites use marketing tools and concepts to understand, respond to, involve and communicate with their political market in order to achieve their goals. Political elites include candidates, politicians, leaders, parties, governments, government departments and programs, and interest groups. Their political marketing goals, market, product, tools and approaches are wide-ranging. (LESS-MARSHMENT, 2014, p.4) Term political marketing is established in the media reality. It was created in order to be able to name the policy tools which can influence voters, not only in the short term but in the long term. With the development of media and communication technologies it was necessary to find ways and methods of addressing a selected group of voters. Political marketing is evolving almost 50 years, but we can understand how can change politics. Political parties are considered to be essential marketing activities and looking for ways to use them. Currently, political parties hire experts in marketing, political science and sociology, to lead political campaigns. If they want to succeed in the political struggle must "make pre-election campaign," but also systematically monitor the marketing environment, analyze it and to develop a marketing strategy. The aim of marketing activities of political parties is to reach voters and get their votes. Through voters can indeed political parties to gain power and influence processes in society. Candidates and leaders of political parties offering their vision, strategy and goals are similar, as marketers in the business environment. They must be able to reach the voter values, ideas and solutions to issues that present and represent and they must do it systematically, not just before the election. Marketers, analysts on political marketing firm that correct political marketing must be able to reach the "heart, mind and wallet." The subject of political marketing is the voter
who cast their votes in favor of the political party on the basis of political marketing its
candidate or political party. (ŠTĚDROŇ, 2013, p.47). Marketing policy acts as a major creator
and affect the public opinion.
The aim of paper is characterizing and examine the influence of political marketing on the
behavior of voters. In this paper we argue with the existing theory of political marketing, based
on the results of his own research on specific situations.

Political marketing

Political marketing is a perspective from which to understand phenomena in the political sphere,
and an approach that seeks to facilitate political exchanges of value through interactions in the
electoral, parliamentary and governmental markets to manage relationships with stakeholders.
(ORMROD, 2013, p.18) The purpose of the marketing activities of political parties is to get the
voices of voters. Political marketing research and analysis tools of marketing communication
is a scientific problem that is being studied comparative and analytical methods and techniques.
Analytical tools and techniques of political marketing may be specific to particular purpose,
based on the needs of political parties.

Prerequisite for successful political marketing are:

- Research, analyze the environment of macro and micro environment, views and
  sentiments of voters;
- Analysis of political candidates chosen by the political party, identifying strengths and
  weaknesses of the political party and candidates;
- The concept of strategy, optimal and several strategic scenarios;
- The concept of strategic marketing plans, targeting and positioning;
- Defining the aims and campaign strategies;
- Implementation of selected communication techniques, implementation of the
  objectives of the marketing plan;
- Verification of the correctness of objectives - control analyzes and opinion surveys.

Professionalism of these campaigns provide a renowned agency that specialize on political
marketing. Professionalization marketing activities of political parties is evident wherever the
emphasis is on strategy and management. As in the case of an economic and political entity,
consumers, citizens have the same decision-making power. Although in the early days of
development of political marketing taking place to apply the same techniques as in promotional
marketing products for everyday consumption, the situation today is vastly different, and you
can name effective practices and approaches. Visualization tools of political marketing will
provide us with a basis for further reflection.
There are a range of political market research tools to identify and understand the public and other markets. Market research includes the usual quantitative and qualitative techniques such as polls and focus groups but also role play and deliberation and, more recently, experimental and analytical marketing research. Segmentation and voter profiling helps understand voters and volunteers at an individual level to then connect them into new groups politicians can target. Strategies include: positioning, which suggests that parties and candidates need to take account of the competition and ensure they occupy a distinctive, superior position from which they can attract support; adopting a sales or market orientation towards electioneering, which involves either focusing on using research to create effective communication to sell the product to the voter or utilizing the results of research to create a product that the voter will want because it meets their needs and wants; and political branding to create a long-term sustainable relationship with voters. (LESS-MARSHMENT, 2014, p.6-7). Strategies for communication include e-marketing, viral marketing, political advertising, management and public relations and focused on long-term communication. Political marketing also has tools for how to organize, such as political, marketing campaigns, political party marketing and management. All of these tools work in relation to each other. (CHYTILEK, EIBL, 2012, p.109-115).
Political stakeholders

The political market is much more complex. Political entities, like businesses, are dependent on the various stakeholder groups and entities. For illustration we imagine them in Figure 2:

Figure 2: Political stakeholders


Political entities use various stakeholders in the development of campaigns. Each of which, as seen in FIG. 2, has a purpose and can be used in shaping campaigns, image building, addressing donors - donors, opened discussions on political issues. (LESS-MARSHMENT, 2014, p.4). The importance of different stakeholders differs from one organisation to another; and for politicians and parties, between opposition and government. Argue that in elections parties might tailor their product to suit key target markets but once in government politicians need to meet ‘the broader stakeholder needs of society. The relationship between politicians and voters is more complex than the marketing models acknowledge and the preferences of traditional voters, interest groups, other political leaders and, as argued, the media, must be taken into consideration’. All stakeholders could potentially impact on the ability of a political organisation or actor to achieve their goals. If candidates want to employ sophisticated market research to understand voters better, they need to obtain financial donations to fund such research, so they need to identify potential donors; if they want to get out the vote, they need to recruit high-quality volunteers; if they want to communicate with the electorate, they need to consider the media; and once in government, politicians. (LESS-MARSHMENT, 2014, p.4). Stakeholders groups can be for each candidate or political party different and even unique, because each a political subject has its own objectives and use different methods and ways to
achieve them. Stakeholders are invited to be specific on the political and cultural environment, social and economic certainties characteristics. Influence of on stakeholders is political marketing can be very significant.

Influence on the voter’s behavior

Voters are part of the political system as well as by state and local governments, political parties, trade unions and political stakeholders. Output that is necessary to examine its behavior is to vote or abstention in the vote. All outputs are the Constitution and other legal documents governing the right to vote. Start the process of conversion consisting of structural elements such as voter knowledge, values they share, the emotions that characterize it and the other "(JABLONSKI, 2002, p.75). Results of voting behavior of voters are seen as feedback. It serves as a link between political parties and voters (FTOREK, 2010, p.24).

We can define groups of factors affecting the action of political parties in political marketing, political campaigns. These factors may be divided general - they affect the whole of the political party as a whole on the basis of its action in opposition or coalition. It includes voters with experience action of a particular political party. The second factors are individual. This factors are assessed based on the personal abilities of candidates for politicians. They monitor their attitudes, behaviors, values, personal qualities and moral characteristics. They then examine other personality capabilities for the performance political functions. Examine other personality capabilities to perform political functions. These factors create a candidate profile and thus have an impact on his election but also for the actual campaign and the entire political entity. The aim of marketing activities of political parties is to reach voters and get their votes. Political parties can gain power and influence social processes only through voters. Polls that explore the voters and their behavior but also the preferences of political parties. Used to identify the accuracy of marketing objectives and strategies, and verify the attractiveness of existing policies but also to investigate the responses of voters to new policy ideas or actual themes.

Political entities know that to influence the decision of the voters, it is necessary to choose the appropriate type of marketing tool, promotion and methods of communication with voters. Political marketing not uses always the rational characteristics, trying to cause a reaction and works with the emotional elements. Voters decisions should be rational, based on experience, political attitudes, political party programs, respecting moral attitudes, and many other factors. Decision-making is not always rational.

Rational decision-making requires is related to the views and attitudes that a political subject presents. Voter interested in topics and ways of solving problems, increase the standard of living and quality of life during the season of a particular political party, percentage of specific people or leader.(FTOREK, 2010, p.27).Any voter who decided on the basis of rational effects is usually higher age and educated, live orderly way of life in accordance with cultural traditions. The rational type of voter is also one that is acutely aware that if you go to vote selected as the "lesser evil" is not optimal political entity.
Emotional effects are more common than he realizes voters and their political marketing can be used them. Focusing on the basis of sympathy, antipathy or other reasons, cannot be justified by rational arguments, reactivity based on ad hoc decisions, a decision based on someone else's preferences based communicated attitude. Emotional effects are intense and in political marketing have their unique place especially since a relatively large part of the electorate is undecided and just before the elections.

Political parties, candidates have marketing specialists who create systems of communication with voters. These specialists manage political campaigning and public relations experts create image of a political party or a candidate himself. The funds which the marketing political parties are spent every year above, namely the need to control more and more marketing activities and intensified marketing offer. Today, the political parties communicate with voters or potential voters through their permanent staff who work operationally through suppliers it hired professionals and marketing experts who provide their services through volunteers or electronic means of communication (JABLONSKI, 2002, p.124).

Not all effects can be included in the typology. Then we will try to put some effects on voters who do not fall within the existing typology as be influenced by many external factors. Their lists based on selected questions from their own questionnaire surveys conducted in local elections SR 2014 from 11/08/2014 to 12/02/2014 - 208 respondents and in elections to the parliament in 2016 from 25/02/2016 to 10/03/2016 - 345 respondents.

Figure 3: Which of the forms of marketing to the of political entities before the elections usually most interested in?

Source: own research

According to a survey, only a minimum of respondents are interested in any marketing campaign of political entities, which clearly confirms the views of theorists of the importance of marketing for political parties if they are to succeed in the campaign.

Figure 4: Q: Are you interested in recent months, some marketing campaign in the elections to the parliament in 2016?
Question was directed to the fact that the campaign interested does not necessarily mean that the campaign was unsuccessful. But voters appreciate imagination and also 20% of the electorate, given that ever came to elections (in the parliamentary elections, it was 59%) is an important issue that affects the right campaign.

If we look at where the campaign is more significant strategy, ie long-term goals and direction of political entities clearly to us from the following graphical representation shows that voters are in the parliamentary elections intensely interested in strategy and strategic objectives of the political entities than they do in municipal elections. Question: Should you consider political parties or individual candidates clearly defined (electoral, marketing) strategy? They are outlined in the following figure.

Figure 5:

![Graphical representation of political strategy](source.png)

Source: own research

The importance of political marketing shows the results of the consultation, in which respondents confirmed the influence of political marketing. 30% of respondents in local elections 35% in parliamentary elections expected to marketing communication on the part of political entities and decide accordingly what message and objectives are communicated. Other percentage of respondents in local elections 33% in parliamentary and 52% percent of people expect good political marketing but not decided by just under his influence.

Figure 6: Question: It affects you see the choice of a particular party / candidate, his political marketing?
The figure showed that a large percentage of voters expect political parties to be in marketing campaigns invest will pay attention to the content page campaign - programs with strategies, because marketing campaigns heavily influence voters and, therefore, results and of course success in elections they are dependent on marketing. During the campaign taking shape their views and only a small percentage of respondents, it voters neither this campaign. Of course, this depends on whether the municipal elections, parliamentary elections or elections to the European Parliament. Theorists but also marketers of agencies who organize these campaigns has also pointed out that marketing activity for campaigns have the greatest impact on undecided voters. Investment in marketing is, in terms of political entities appear to be effective money spent.

Not every political party has a leader who sympathize with a large part of the population because they can reach their charism, opinions and attitudes. In this case, the view becomes the leader among voters, in other words, opinion leader - personalities, will take voters to identify with him and regarded him as their own. The problem is when the leader changed his mind under the influence of circumstances that could not be foreseen, as examples of such events include refugee crisis or terrorist attacks. In this case, voters react and political parties on the situation and expect politicians not only view, but also concrete steps with which neither the political or marketing plans did not count. In this case, presenting policy suggests possible solutions and can thus influence public opinion. Responding to current events is always marketing opportunities to influence voters and strengthen its position.

**Conclusion**

Political marketing is a substantial aspect of modern politics; politicians, advisors, parties and governments themselves use segmentation, market research, branding, and public relations to help them win and maintain support from the public. Political marketing also has profound impact on the way the political world operates. In political marketing are now using increasingly sophisticated methods of marketing and political parties spend more and more money on marketing campaign. Good marketing win elections. For several decades, profiles and now it is no longer just the application and development of corporate marketing activities,
has its own methods and procedures. Its central theme is to find a name and a way to get the support of the presented ideas, themes or ideology in public and succeed in the campaign. Marketing policy acts as a master creator and influences of polls, named after the effective communication with the public and voters using persuasive methods and means, looking for ways to present their own vision and strategy and, not least, let’s get a loyal voter who shares the values of the political party with its leader proclaimed or orientation. Politicians actively use marketing as a tool of political struggle, and that they do so daily we can see in their daily experience. Political parties are aware that the decision to influence voters need to choose the appropriate type of marketing tool, a way of promoting political entity and methods of communication with voters. Marketing campaigns taking place just before the election but still though with less intensity. In order to establish an effective marketing campaign, it is necessary to identify, on the basis of which the voters decide. Electoral behavior is not predictive only rational characteristics, so trying to get a response to stimuli and to work with the emotional elements are now part of the marketing activities of political entities. In the paper we have tried to point out the influence of political marketing on the behavior of voters and show how modern tools are used in political marketing. Based on the results of the surveys, we can identify influence marketing on the voter’s preferences, opinions or attitudes. We can thus conclude that political marketing is largely influenced by the behavior of voters and is the most effective tool to gain votes and support of the voters.

References


Electronic resources:


Owners’ Equity in a Scientific Focus

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Abstract

The goal of founding a business is to generate profit for the owners of the specific business and by this to contribute to the maximization of the owners’ or shareholders’ wealth. The opening transaction of a company after its establishment recorded in the accounting books is the initial investment of funds made by the owners of the firm. Every investor, the user of accounting information, when thinking about investing or evaluating business performance, firstly he/she examines data about owner´s equity on the balance sheet. This scientific paper deals with a historical development of the owner’s equity concept in Europe, the United States of America and in Slovakia as well, and the classification of owner’s equity in their accounting legislation. This study explores the development of owner’s equity and the qualitative discrepancies among the US GAAP, IFRS and the Slovak statutory accounting. Our investigation is motivated by the rapid globalization and by the ongoing harmonization process in accounting standards. The meaning of the owner’s equity concept is examined; and the factors which have had an impact on owner’s equity notion throughout the last few decades are also analyzed. The objective is to provide a complex comparison of the owner’s equity definition development and in addition, this phenomenon is studied from an accounting treatment perspective of the global accounting standards of IFRS, US GAAP and the Slovak Accounting Act. Finally, the scientific paper will illustrate an investigated matter in a practical perspective comprising selected international and domestic companies.

Keywords: Owner’s equity, IFRS, US GAAP, Slovak accounting standards.

JEL Classification: M41, M48

Introduction

The main goal of each entrepreneur is to manage a successful business, to generate profit and to maximize owners’ wealth and minimize volatility of the income. This is the major reason why owners’ equity is so important figure to be monitored in the corporate finance. To achieve the goal, companies are very much interested in determining and analyzing equity, its components and factors having been able to influence it. One of the most relevant sources of information on the company is the accounting information system. Accounting conceptual framework defines owners’ equity and its components and accepted accounting standards provide a methodology of an accounting treatment and reporting. Businesses worldwide apply national statutory accounting or national GAAP or there is an approved regulation to apply one of the global international accounting sets (US GAAP or IFRS). National accounting principles are in an ongoing process of development and amendments owing to changes influenced by
globalization. The research object is shareholders’ equity concept in the light of global sets of accounting systems. The objective of the scientific paper is to provide a comprehensive study where owners’ equity concept is compared from the perspective international accounting principles – US GAAP and IFRS, and Slovak accounting Act.

Equity in Literature Review
Equity is the basic risk capital of an enterprise as conveyed by Schroeder et al (2014). In the last few decades many empirical works have been attracted by the concept of owners’ equity, especially in the financial accounting literature. Tiffin (1998) characterizes equity or shareholders’ funds as “a heading covering the investment by shareholders or equity investors in the business.” Riahi-Belkaoui (1998) considers owners’ equity to be the capital of a company, which is measured as a difference between the total business assets and total liabilities. He identifies this residual interest as stockholders’ equity, i.e. residual remaining after deducting all business’ obligations owed to creditors from the total assets. Berry (1999) understood owners’ equity in several ways. “In a sense, it is a liability of the business insofar as it represents a claim against the company’s assets”. On the other hand, it differs from liabilities which have maturity dates (dates of final payment off) and the amount of obligations that are precisely determined. To define equity using liabilities could not work. Owners’ equity usually remains in the company until the owners decide to leave the company and appropriate shares of the residual are paid to them or all owners decide to close the business and they will divide the residual based on their ownership percentage. Equity may be explained as “a residual claim against the asset of the business after all other liabilities have been settled”. Owners’ equity can be considered “everything” which is either invested into the company by owners or which is generated by the entity in its operations and again reinvested in the company’s activities. Therefore, from a legal point of view, it may be defined as capital (capital resource) or wealth. The wealth perceived from a pragmatic perspective has various forms – just a few examples – money in banks, land, building, patent, etc. but obligations to other companies i.e. debt owed must be deducted, then this relation is represented by the accounting equation formula:  

\[ \text{Assets (A)} - \text{Liabilities (L)} = \text{Shareholders’ Equity (SE)}. \]  

(1)

The residual interest provides the owner with a claim against the assets after creditors’ claims are satisfied. Because the company is owned by some specific individual or group the proprietary theory of equity was introduced and it has become the prominent one because the residual interests of owners were considered crucial in financial statement preparations and the owner is the primary focus of a company’s financial statements. The first formula (1) may be transformed according this theory into another one, in which net worth or equity section of the balance sheet ought to be understood as proprietorship:

\[ \text{Assets (A)} - \text{Liabilities (L)} = \text{Proprietorship} \]  

(2)

The fundamental idea of the second formula conveys that the existence of the company is because of providing the means to continue performing operations for its owners.

Another specification of shareholders’ equity is given by Murthy (2009), who uses the term Net worth instead of owners’ equity. This term can be found also in the book by Periasamy (2009),
where it is defined as capital which “refers to the value of assets owned by a business and which are used during the course of business operations to generate additional capital”. Equity for corporations can be further determined as the residual interest in the firm’s assets after deducting liabilities. (Carmichael and Graham, 2012) The same definition is published by Shamrock (2012), where he mentions, that this interpretation is identical for IFRS and US GAAP.

When the corporate form of businesses arose the ownership started to be separated from the management. The limited liability to the owners meant that owners were responsible for the loss only to the extent of their investments into the business. It lead to the perception that a corporation is a fictional unit, “as though it were a person” (Schroeder, Cark & Cathy, 2011, p.484). Many theories evolved and among the first of them was the entity theory conveyed by the simple formula:

\[ \text{Assets} = \text{Equities} \]

(3)

This theory places the company to the centre of the interest for financial accounting and reporting objectives, not the owners. The significance of the theory was the acknowledgement that also creditors and owners contributed capital resources to the company and the company is a separately and distinctively existing entity. The assets and liabilities are possessed by the entity not by the owners.

The concept of owners’ equity also includes more components of equity. According to Riahi-Belkaoui (1998) stockholders’ equity consists of A) contributed capital and B) earned capital. Another classification of the stockholders’ equity is as follows:

1. Contributed Capital
2. Unrealized Capital (Revaluation Surplus)
3. Retained Earnings.

**Contributed capital** is formed with capital stock and additional paid-in capital. Revaluation Surplus arises under IFRS because companies are allowed to revalue their tangible and intangible assets (in accordance with the IAS 16, 36 and 38 ) to fair value under certain circumstances, but apart from that it also includes items that increased or decreased in their fair value and the gain or loss is not considered realized until items are sold, these increases or decreases are called unrealized gains or losses, i.e. unrealized capital, as well. **Unrealized capital** “increases in stockholders’ equity are not related to the issuance of stock or to retained earnings”. Retained earnings represent the part of net earnings, which has been reinvested in the company. (Riahi-Belkaoui, 1998). A similar approach is published by Stittle and Wearing (2008): equity of the company includes capital invested by the owners plus profit, which has been generated and retained since the establishment of the company. Corporate equity: owners’ equity, legal (stated) capital and retained earnings where legal capital is usually used by state law. It is defined as the amount of capital that must be retained by the utility for the protection of its creditors. Owners’ equity in this case refers to capital invested by owners minus legal capital.
Conceptual research of the development of the owners’ equity concept

US Generally Accepted Accounting Principles, International Financial Reporting Standards and Slovak accounting Act provide complete overview about Stockholders’ equity, characterize definitions of terms related to owners’ equity, accounting policies and procedures, show forms of its presentation and disclosure, journal entries affected by the components of owners’ equity. Reporting is essential for users of financial statements and according Capps, Koonce, and Petroni (2016) natural optimism is most likely to have an impact on financial reporting as well. Many standard setters are now dealing with what is the adequate information what must be disclosed for understanding capital structure of the companies and gaining competences to judge satisfactorily the company’ risks. (Male& Chand, 2011), (Stevenson, 2011).

Owners’ equity under US GAAP

According to the US GAAP “total stockholders’ equity is the residual interest of the owners in the net assets of the corporation - the equity or capital of the owners is the corporation’s assets less its liabilities” (Nicolai, Bazley, Jones, 2010, p.783). Similarly Kieso, Weyghand & Warfield (2013, p.745) state that shareholders’ (owners’) equity is not a claim to specific assets but a claim against a portion of the total assets, and moreover, it represents the cumulative net contributions by stockholders plus retained earnings.” Bragg (2008) adds it is “the difference between the total of all recorded assets and liabilities on the balance sheet”. Owners’ equity has been specified as “the total of all capital contributions and retained earnings”. (Bragg, 2008). Capital resources invested by the owners of the company represent the capital is also called Legal Capital or Capital Stock. (Bragg, 2008) Subsequently, Legal capital was defined under the US GAAP in 2011 by Jentleson and Bragg (2011) as the accumulated par or stated value of stock. According to them it “typically refers to that portion of the stockholders’ investment in a corporation that is permanent in nature and represents assets that will continue to be available from the risk management perspective, for the satisfaction of creditor’s claims”. Owners’ investments can have two forms. The true owners of the firm are the owners of common stock. Through this ownership they have the following rights:

a) to get dividends (i.e. to receive a partial distribution of company’s income when dividends are declared),

b) to have preemptive rights,

c) to vote on annual meetings and to elect members of the Board of Directors and establish corporate policies.

The company can issue many classes of common stock, which usually entitle its owners to different rights. Corporations can also issue preferred stock, which “has fewer (or none) of the rights conferred on common stock”. They may be callable, convertible convertible into common stock, participating and cumulative preferred stock with its preference to receive dividends when declared.

The component of the capital called Additional Paid-in Capital includes “any payments received from investors in excess of par value of the stock”. (Bragg, 2008) The definition of Additional Paid-in Capital was amended by US GAAP in 2012 as the sum of the amount received which outperforms the par or stated value of capital stock in a time of issuance and of
the amount of cash collected from other transactions containing the firm’s stockholders and/or stockholders. (Jentleson and Bragg, 2011).

Jentleson and Bragg (2011) and Flood (2013, 2014) defined Donated capital under US GAAP, as a part of stockholders´ equity, which is a donation from shareholders for the company. It can be an asset or service provided to the company by the shareholder. Jentleson and Bragg (2011) present Contributed capital as the value of Capital Stock and Additional Paid-in Capital, later as the amount of Legal Capital, Additional Paid-in Capital and Donated Capital. Nowadays Donated Capital may be treated also immediately as the gain. If the company decides to buy back shares from shareholders, we speak about treasury stock. It has negative impact on owners’ equity. (Bragg, 2008) Treasury stock under US GAAP 2014 is characterized as a company´s own stock, which has been issued in the past, then repurchased by the company, and are still owned by the firm, they have not been reissued or retired. (Flood, 2013)

Table 1 – Owners´ Equity and its components under US GAAP

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<td>Additional</td>
<td>1. Common</td>
<td>2. Preferred</td>
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<td>Paid-in Capital</td>
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<td>Donated</td>
<td>3. Treasury stock</td>
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<td></td>
<td>Capital*</td>
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<tr>
<th>RETAINED EARNINGS</th>
<th>Earned Income</th>
<th>Appropriated</th>
<th>Unappropriated</th>
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<th>OTHER COMPREHENSIVE INCOME</th>
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<th>LESS: TREASURY STOCK*</th>
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*Note: treasury stock reducing total shareholders´ equity if cost method of accounting is applied, i.e. the value of treasury is measured at market value of common stock repurchased, nowadays DC considered as the contributed capital only in a specific situation.

According to the US GAAP owners´ equity also includes Retained Earnings defined as “a company´s accumulated earnings since its inception, less any distributions to shareholders” – a portion of the accumulated net income of the company, which has been retained for reinvestment to the business itself, since the company’s existence. Similarly, retained earnings mean the amount of undistributed earnings of the company (Jentleson and Bragg, 2011), (Flood, 2013), (Flood, 2014). According to US GAAP 2015 (Flood, 2014) there are no other changes in the concept of owners´ equity, which have not been examined in the previous years.
Owners´ equity under IFRS

IASC´s Framework for the Preparation and Presentation of Financial Statements defines equity and its components in the same way as US GAAP. Equity is defined as the net asset of the entity. IAS 1 divides Stockholders´ interest into three big parts: issued capital, reserves, accumulated profits or losses. (Epstein and Mirza, 2003). Mackenzie et al. (2012a) (2012b) classify Equity into 1. share capital, share premium, 2. retained earnings, and 3. other components of equity (reserves). IFRS (Epstein and Mirza, 2003), (Epstein and Jermakowicz, 2008), (Mackenzie et al, 2012b) define Legal Capital and Capital Stock in the same way, as it is stated in US GAAP. In the USA it is called a) Additional paid-in capital, b) Contributed capital, or c) Capital Stock in excess of par value and in the United Kingdom (Epstein and Mirza, 2003), in the European Union (Epstein and Jermakowicz, 2008) and in many other jurisdictions (Mackenzie et al, 2012a) it is referred to as share premium. Additional paid-in capital is also allowed to be used instead of Share premium in IFRS since 2008.

Revaluation reserve means the difference between the historical cost of property, plant or equipment (net of accumulated depreciation) and the fair value, when a company holds the mentioned assets at other than historical cost, thus applying the revaluation principle of asset measurement. (Epstein and Mirza, 2003) This definition has been modified since 2012 by Mackenzie: “When a company carries property, plant, and equipment or intangible assets under the revaluation model, the difference between the cost (net of accumulated depreciation) and the fair value is recognized in other comprehensive income and accumulated in equity as the Revaluation Surplus.” (Mackenzie et al, 2012a; Mackenzie et al, 2012b; Mackenzie et al, 2014)

Total comprehensive income for the period includes changes in revaluation surplus, gains and losses arising from changes in foreign exchange, gains and losses on re-measuring available-for-sale financial assets, the effective portion of gains and losses on hedging instruments in a cash flow hedge and actuarial gains and losses on defined employee benefit plans. Total comprehensive income for the period has been renamed as Other comprehensive income since 2012. This change in the name was made due to confusions and errors that the name was always causing. Nowadays Comprehensive income includes Net income of the period plus Other comprehensive income.

Reserves under IFRS include capital reserves, revenue reserves, statutory reserves, voluntary reserves, special reserves and contingency reserves. “Statutory reserves are created based on the requirements of the law or the statute under which the company is incorporated. Sometimes, company´s articles, charter, or bylaws may require that each year the company set aside a certain percentage of its net profit by way of a contingency or general reserve.” (Epstein and Mirza, 2003). Mackenzie at al. (2012a, 2012b, 2014) determine also Donated capital, as it is presented in the US GAAP.

Retained earnings are defined by IFRS as a company´s accumulated net income less any distributions. They are the undistributed earnings of the company. US GAAP characterizes them in the same way. (Epstein and Mirza, 2003) “Accounting traditionally has clearly distinguished between equity contributed by owners and that resulting from the operating results of the reporting entity.
IFRS also characterize **Treasury shares**, which are the shares of a company that have been repurchased by the firm. These shares have no voting rights and do not receive dividends. They are also called Buy-Back Shares. IFRS does not specify the accounting for treasury share transactions. (Epstein and Jermakowicz, 2008)

Table 2 - Owners’ Equity and its components under IFRS

<table>
<thead>
<tr>
<th>Total owners’ equity</th>
<th>Share capital (Legal capital and Capital Stock)</th>
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<tr>
<td></td>
<td>Share premium (Capital contributed in excess of par value)</td>
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<td></td>
<td>Reserves</td>
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<td>Donated capital</td>
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<td>Retained Earnings</td>
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<td>Other comprehensive income</td>
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<td>Less: Treasury shares</td>
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**Owners’ equity under the Slovak accounting Act**

Slovak Accounting as a statutory accounting must comply with the Slovak accounting Act n. 431 Coll/2002. and all measurements of Ministry of Finance from 2006 to 2016, where owners’ equity is defined as the difference between the amount of assets and liabilities of a company. Referring to the measurement of the Ministry of Finance from 16th December 2002 owners’ equity components are:

**Contributed Capital:**

1. Capital Stock (Share Capital, Legal Capital) – invested capital – at par, or no par
2. Share premium – the amount obtained in excess of par
3. Other capital funds (Donated Capital) – gifts from investors, who are company’s owners having no impact on capital stock
4. Revaluation reserves from assets and liabilities; investments and from mergers and acquisitions
5. Legal reserve fund from capital contributions

**Earned Capital**

6. Legal reserve fund created from the profit of the given period
7. Statutory reserve fund created from the profit of the given period
8. Other funds created from profits
9. Net income or net loss of current year

In 2004 the following items were added to owners’ equity:

10. Retained earnings (profits) from previous years, and
11. Retained earnings (losses) from previous years.

These accounts include and report: a) accumulated net profits or losses retained in a company of the previous periods (after distributions to owners in the form of dividends; or used for various reserve fund creation or creating provisions for social liabilities),
a) adjustments due to the changes of accounting methods or restatements due to the errors fixed. These events occurred in the past years different from the year of restatement.

Table 3 - Owners’ equity and its components in Slovakia

<table>
<thead>
<tr>
<th>In TOTAL OWNERS’ EQUITY</th>
<th>PAID IN CAPITAL</th>
<th>FUNDS CREATED FROM THE PROFIT</th>
<th>CAPITAL (Legal capital = Capital Stock)</th>
<th>Share premium</th>
<th>Revaluation reserves</th>
<th>Statutory reserve fund</th>
<th>Donated capital</th>
<th>Statutory reserve fund, legal reserve fund</th>
<th>Other legal social fund</th>
<th>Retained Earnings</th>
<th>Net income of the current year</th>
</tr>
</thead>
</table>

Slovak legislation Commercial Code has no legislation valid for Donated Capital, it is only the Accounting Act 431/2002 Coll. and its § 6 (4) which states Donated Capital (abbreviated further DC) represents owners’ resources. As far as distribution of the net earnings are related the Commercial Code of Slovakia in its § 179 (4) enables to distribute owners’ resources, not only the net profit but also paid in capital, where Slovakia also includes donated capital. The paragraphs of the Commercial Code § 144, § 208 a § 223 in Slovakia allow the owners’ equity to be used for an increase of the Capital Stock (Common Stock, par). An issuance of the common stock means underwriting the share in the company and it must be paid in the form of monetary and nonmonetary assets. The owners participate on business functioning utilizing these assets and they have the right to share the profit or loss generated by business, it means they have the right to get a portion of the profit as a dividend. In Slovakia any resources invested into the business needn’t represent the capital stock, par; it is obvious from the paragraph § 67 of the Slovak Commercial Code which allows contributions in excess of “paid in capital” to the Legal Reserve Fund (further abbreviated LRF) (from the generated profit or from the initial investment) and LRF is a part of Contributed Capital, as well. The shareholders’ equity is increased by these contributions to LRF, but in the accordance with the accounting legislation it is the similar situation as Slovak “donated capital” (other capital funds), which also increases Contributed Capital. But according to the Commercial Code § 59 the owner’s share is neither increased by contributing to LRF nor to Donated capital unlike according to the Accounting Act. That means if the owners’ share cannot be considered as an increase of the capital stock then their right to receive the portion of the net earnings is not increased either. It is obvious there is the conflict between the Commercial Code and Slovak Accounting Act, which considers these discussed contributions (LRF and DC) as the increase of company’s capital stock.

Owners’ Equity reporting structure under the US GAAP, IFRS and in SR

The owners’ equity section of the balance sheet (US GAAP) or on the statement of financial position (IFRS) includes the following information related to capital stock,
additional paid-in capital, and retained earnings (Saxanova, 2014, p.74):

a. “Stockholders’ equity of corporations.
(1) Capital stock are carried at par, stated, or no-par value of the shares issued.
- Capital obtained in $ = number of shares issued x par value
  i) the authorized shares – the maximum shares approved on the general meeting of
     shareholders to be issued
  ii) the issued shares = outstanding and treasury shares
  iii) the outstanding shares are shares issued and still in the hands of shareholders, par
     value amounts must be disclosed.
  iv) Treasury stock is shown as a reduction of stockholders’ equity.
(2) Additional paid-in capital is primarily the excess of amounts paid in over the
    par or stated value.
    Capital obtained in $ = number of shares issued x (market value - par value)
(3) Retained earnings are the undistributed earnings of the corporation. Separate
    disclosure is made of unappropriated (available for dividends) and appropriat
    (restricted) retained earnings.”

There may be special items in the shareholders equity which have the character of a debt or
   equity, for instance redeemable preferred stock. They have features that make the security more
   like debt than an equity instrument. If the company offers redeemable preferred stock that are
   compulsory redeemable at the discretion of a holder, then issuer cannot control it and these
   preferred stock must be reported as a liability. Previously, public companies were not allowed
   to disclose and report these debt-like preferred stock issues within the equity section, but they
   were not required to report them as a liability either. There were suggestions to classify them
   as debt-like securities, reported as equity or in the mezzanine section of balance sheets between
   debt and equity. However, accountants with more experience will understand that redeemable
   preferred stock need not be a liability unless its redemption is mandatory. From the category of
   new instruments, e.g. development impact bonds (DIBs) mobilize the capital for new business
   models creating opportunities for community development; they pool multiple performance-
   based contracts and turn social problems into investible opportunities, investors’ returns are
   based on the achievement of a pre-determined outcome. They are not bonds, they have returns
determined as the maximum that can be earned (like fixed income investments), but neither
   cash interest payments nor the principal is guaranteed -equity investment characteristics. (Saxunova,
   2015). The FASB now requires debt-like securities, like redeemable preferred stock, to be classified as liabilities and be measured and accounted for similar to liabilities, so does IFRS. This issue has not been tackled with in Slovak Accounting legislation. It is always recommended to study conditions of dilutive securities as well to fully understand the nature of a dilutive security (convertible bonds, call options etc.). The silent partnership also may be considered as an item of a mezzanine section, depending on the terms of a contract, but these items will be an object of the research in the close future.

**Practical research results and discussion**
The object of our practical research are the public companies, trading on stock exchanges in
Europe, USA and in Slovakia focusing on components of owners’ equity that are reported in
their financial statements. It is obvious that if a company is established, its original share capital (Capital Stock) must be officially registered, and as it carries on successfully in enterprising retained earnings grow. There are other components being focused on and their examination can provide interesting information to the users on the company’s performance and financial position. The examination period covers the year 2014. Sources of analyzed data are the webpages www.sec.gov and www.finstat.sk and official webpages of the analyzed companies.

First companies trading on New York Stock Exchange, from USA were examined with the aim of monitoring entities’ financial statements in the Mega-cap and in the Large-cap. Moreover, companies in Europe were investigated. The major sample consisted of companies trading on the Budapest Stock Exchange and the Warsaw Stock Exchange, and minimum companies trade on the Bratislava Stock Exchange. Our results are presented in the following tables.

**United States**

Table 4 - % of companies in USA report specific components of owners’ equity

<table>
<thead>
<tr>
<th>Donated Capital</th>
<th>Additional paid-in capital</th>
<th>Accumulated other comprehensive income</th>
<th>Treasury shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>80%</td>
<td>96.67%</td>
<td>76.67%</td>
</tr>
</tbody>
</table>

**Europe**

Table 5 - % of companies in Europe report specific components of owners’ equity

<table>
<thead>
<tr>
<th>Donated Capital</th>
<th>Share premium</th>
<th>Reserves</th>
<th>Other comprehensive income</th>
<th>Treasury shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>32.26%</td>
<td>80.65%</td>
<td>16.13%</td>
<td>32.26%</td>
</tr>
</tbody>
</table>

**Slovakia**

Table 6 - % of companies in Slovakia report specific components of owners’ equity

<table>
<thead>
<tr>
<th>Donated Capital</th>
<th>Share premium</th>
<th>Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.33%</td>
<td>19.05%</td>
<td>71.43%</td>
</tr>
</tbody>
</table>

**Donated Capital:** As we can see, there are enormous differences among results of the investigated countries. While under US GAAP and IFRS companies practically did not report donated capital in 2014, in Slovakia 33.33% of companies reported this item in their financial statements. Before the year 2002 in Slovakia Donated Capital comprised all gifts and state and other subsidies, but at this moment it is only allow to increase this account by the gifts from the owners. Other gifts are immediately considered gain or unearned revenue (for long-term asset depreciated or amortized).

**Additional Paid In Capital or Share Premium:** The second equity element examined was share premium or additional paid-in capital in the USA. There is much higher percentage of companies issuing shares at par or stated value than it is in Europe where share premium is recorded. In North America, in 2014, this number reached 80%, while in Europe it was just a little bit higher that 30%. In Slovakia only 19% of companies showed share premium. The
USA prefers having lower levels of Legal Capital than European companies, included Slovakia. It is not typical for Slovak companies to issue share at par or stated value, usually if at par it might be of a high value. For example, Volks Bank in Slovakia, which was purchased by Sberbank in the year 2012, issued 1 share at par value of 10 000Sk in the past (which is 333,33EUR) and it was also issuance price at that time. The entire capital obtained from the shares issuance is a legal capital. Recently Slovak publicly traded companies are decreasing the par value as it is e.g. in the USA market to the e.g. 5€, 1€ or 0,1€.

**Preferred Stock:** The legislation in the USA motivates investors to underwrite preferred stock by offering them certain tax advantages. The amount of preferred stock dividends, maximum 70%, received from preferred shares are allowed to be tax-exempt. Individuals do not reap such benefits. Individuals are stipulated to invest in preferred stock of qualified domestic corporations and hold them a designated period. Since 2013 the individuals are taxed on this "qualified dividend income" applying capital gains rate (depending which progressive income tax rate bracket the individual belongs) which may be lower than the regular income tax rate. These tax benefits are not allowed at all in Slovakia to such extent. Because also in Slovakia preferred stock dividends are paid to their holders with after tax dollars and tax rate is 15% (capital gain tax rate) in Slovakia. Tax rates in Slovakia for corporate companies is 22% flat rate and for individuals it is 19% up to 35 002€, after this amount it is 25%. Only few of the companies issued preferred stock.

**Reserves** were observed in Europe and Slovakia, where 70 – 80 % of companies reported them in their financial statements. This is typical phenomena for Continental Europe and Japan, the reason is the form of financing in the past, a lot of creditors’ resources have been used for the financing, therefore more protection of the creditors is required, unlike the USA and UK when owners’ equity prevail. On the other hand, accumulated other comprehensive income was presented in 96,67 % of American companies, while Other comprehensive income just in 16,13 % of European companies of our sample. It is associated with more frequent investment into equity and debt securities for major population of the USA, for individuals and also SMEs and large corporations.

**Treasury stock** or share was examined only in companies, which use the US GAAP and the IFRS, because Slovak accounting standards present them as a part of an asset of a company. In the years 2009-2015 the Slovak Accounting Act also directed to report Treasury stock as a reduction of Shareholders’ equity but this has been amended again since January 2016, as it was before the year 2009, to classify them as financial assets. As we can see, also in this case, the percentage of companies, which discloses buy-back shares is more than double in the USA (76,67 %) as in Europe (32,26 %). In this way the USA try to avoid double taxation, by paying dividends or bonuses via stock (stock dividends, restricted shares as share based payments)

**Conclusion**

In this scientific paper we examined the development of the concept of owners’ equity according to the global sets of accounting principles and the Slovak accounting Act. Our investigation has found out that there are only minor discrepancies in the concept of owners’ equity and in the definitions of its components, in the last decade. The major change was
identified in Slovakia, in 2004, when they implemented retained earnings for previous years, separately for gains and losses. IFRS and US GAAP use only the term *Retained earnings*. The study of the “HOW MANY?” selected companies proved uniformity of owners’ equity definition applied in accounting practice whether following US GAAP, IFRS or the Slovak Accounting Act.

Certain distinctions in the mentioned standards were observed with regard to the terms used:

While IFRS uses terms *Revaluation reserves* and *surplus*, US GAAP applies *(Accumulated) Other Comprehensive Income*. Slovakia uses the term: *Differences in measurement from asset and liability revaluation*.

IFRS reports *revaluation surplus*, while US GAAP does not report unrealized gains on those items in the financial statements.

IFRS and Slovak accounting standards use *Share premium*, US GAAP reports *Additional paid-in capital, Contributed Capital* or the Capital Stock in excess of par but the connotation of the terms used are equal.

It may be concluded that the process of harmonizing Slovak accounting is almost completed since Slovak accounting standards are harmonized with the IFRS that are accepted by the European Council for the use in the EU as far as Shareholders’ equity issues are concerned.

Major differences: Slovak accounting standards do not classify *Treasury stock* or *Treasury shares* as the contra equity account, meaning it is not the element of Owners’ equity. They are part of the assets, which is not correct because it does not meet the definition of the assets, the probability of future benefits from the reissuance of the share is not easy to determine, and IFRS requires the probability must be more than 50% and in the USA more than 85%. The issue is not solved yet we assume that due to the low amount of repurchasing activity on the Slovak stock exchange, and also in Slovakia not a lot of companies developed stock ESOP –employee stock option plans as a form of rewarding and motivation for lowering the employees’ fluctuancy.

In addition, in Slovakia *net income of current year* is not presented as a part of retained earnings, as in the IFRS and US GAAP, because the distribution of the net income of the current year is conducted always in the following fiscal period. European and Slovak accounting reporting, based on our research results, are fairly identical, but there are still certain differences visible with regard to American accounting reporting rules.

Reporting of owners’ equity and its components in Slovakia is poorer because of

a) low activity if Bratislava Stock exchange owing to trading undeveloped on the stock exchange, and low trust of Slovak companies to equity securities after the financial crisis.

b) the small number of public trading companies that would be required to report more detailed information,
c) the resources in the companies are usually obtained from banking and other creditors’ institutions and capital acquired through the issuance of common stock is rare, even less via the issuance of preferred stock.

This is the reason why there are shortcomings in the reporting issues linked to the equity companies ignore and do not report these components of owners’ equity in Slovakia. The biggest problem for the analysis is the way how the reserve funds are created in Slovakia according to the Slovak Accounting Act. In Slovakia legal reserve funds, statutory reserve funds, other funds and long-term liabilities of participation interests are created from net income of the current period, while in the US GAAP and IFRS it is not permitted. Retained Earnings in the US GAAP and IFRS always represent the retained profit by the company after the dividends distribution to the owners. Net profit in the US GAAP and IFRS is used only on dividend payments. IFRS also allows creating compulsory reserve funds from net profit, if necessary. In Slovakia from the net profit of the current period various reserve funds may be created (components of the contributed capital or components of the earned capital as well are used, which complicates the situation for the person performing the analysis, he cannot immediately determine and see what it the profit generated since the beginning of the company. )

References


Creating Competitive Advantages of Startups in Slovak Startup Environment

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Abstract

Startups, as fast growing, extremely flexible and highly innovative business units play in the actual economy context an important role. Nowadays startups (startup environment) became very discuss topics with a huge potential in Slovakia as well as worldwide. The reason is that startups have a huge positive impact on whole economy of country especially by supporting increasing of productivity what lead to increasing of competitiveness and economic growth of country. That’s also reason why startups environment is in a last few years supported by national government and private sector by financial and nonfinancial help. However, achieving success in this field is very uncertain and still only a small percentage of startupers really fulfil their expectations. One of the most important premise for startups in case of achieving profitability is its ability to creating, building and sustaining competitive advantages. In other worlds do thinks otherwise, innovative and better than competition. The research presented in this paper has been conducted in Slovak startup environment by questionnaire questioning method. Research question is which are the most important factors lead to competitive advantages of Slovak startups. The part of the research is define system, conditions and challenges which need to be taken in to a consideration when we deal with competitive advantages in Slovak startup environment. The aim of this paper is uncover the most important factors which lead to creating competitive advantages of Slovak startups businesses and describe Slovak startup environment, it’s institutional base, conditions and challenges.

Key words: Competitive Advantages, Startups, Startups Environment, Factors

JEL classification: M13

Introduction

Constantly changing, difficult to predict and volatile external environment brings at present many opportunities and threats. Development and quick progress of high-technology industry created a good basis for the creation of hundreds of new startups in the world as well as in Slovakia. Survive and prosper in such an environment with hyper-competition, more than ever, requires a high degree of flexibility, creativity and personal commitment. Startups as starting firms with great potential for innovation try to answer the question how to do things better, to solve problems creatively and how to get customers. Startup environment in Slovakia is a young, dynamic system with expanding organizational and institutional base. Functioning startup ecosystem can largely affect the economic situation of the whole country. Innovation and flexibility of this type of businesses, cooperation with young and ambitious people and complex impact on the various sectors and the economy overall are the main motivating factors for selecting this issue.
**Definition of the Competitive Advantages and Startups**

If deal with the issue of startups and competitive advantage it is essential to know the meaning of the basic terms related to the solved issue.

Competitive advantage in the general sense can be seen as the ability to do something better than the competition. Looking deeper the competitive advantage of a company is an ability to generate a greater or final customers more perceived value. Ability to meet their requirements and needs better than competition. In practice, we encounter several types of competitive advantages. In startup business are dominated mostly discontinuous competitive advantages, often with inimitable character - highly technological competitive advantages. This type shows an increased level of risk concerning its receipt by the customer, but if the company succeeds ownership of such benefits, the company is able to influence the entire industry.

Term Startup comes from the United States and originally was used to describe internet companies (especially from Silicon Valley) by the end of the last century (SIEA, 2015). In Slovakia, the intensity of its use increased only in a recent years, mostly driven by the increasing interest of this type of business. An essential feature of startups companies is their pursuit of highly innovative solutions to problems. Startups can’t be seen as a traditional companies, it’s more a "*temporary similar businesses created to search for repeatable and scalable business model* (Blank, Dorf, 2012)." Paul Graham, co-founder of Y Combinator, further complements this view by perception startups as firms “*that were designed to fast growth*” (Graham, 2012). Graham says the weekly rise to the level of 5-7%. Achieving similar values, on the Slovak market can be considered impossible because of the characteristic of the market (count of the customers). Nevertheless, rapid growth may be considered as one of the key characteristics of startups. Startup environment in practice often referred to as startup ecosystem. It’s a set of cooperating entities with interaction to increase the quality and improving the conditions for carrying out the businesses.

**Slovak Startup Environment - Characteristics and Components**

Slovak startup environment in the wider international context can be still considered as a young and evolving. In recent years, however, we have recorded an increased level of interest from both the start-up businesses and government. This fact can be viewed from the perspective of young people attributed mostly to the attractiveness, independence and innovation startup form of business. From the perspective of the state is then necessary to identify the positive consequences of the establishment of startups for the economy across the country such as: positive impact on job creation, the development of industry, education and workforce development, as well as international scientific cooperation through strategic partnerships between members of the environment. Startup environment in Slovakia do not includes only startup companies. In practice startup ecosystem consists of several components that interact and cooperate to its development. Namely: startup companies (projects), research centers, co-working centers (incubators), accelerators, state and private institutions to support startups, big companies (corporations) as well as cooperating universities and research institutes.
Startups

Startup can’t be seen as a traditional company, or its smaller version, but it’s necessary to understand legislative perspective. Concept document to support startups and development startup environment in the Slovak Republic presented by the Ministry of Finance, in which a startup can be regarded as capital a company established in the territory of the Slovak Republic, from which he has not expired more than 36 months and at the same time fulfills three basic conditions (MoF, 2015):

- established in order to create innovative products or services,
- a micro, small or medium-sized enterprises,
- founders control the majority of voting rights.

Startups are starting businesses with high innovation potential, which are characterized by doing things differently. Today, startups can be considered particularly debated topic both in the world as well as in Slovakia. Reasons why, in recent years, startups businesses gaining popularity are mainly in improving conditions and support that they have for their projects. Objectively we can’t yet speak about much better services from the state, simplifying the conditions for the establishment and enforcement of rights. Progress can be seen especially in the availability of capital as well as financial support. It is already possible to say that there is enough capital, but investment remains low. This situation explains Andrej Kiska Jr., from the investment firm Credo Ventures by the lack of quality projects. Compared internationally, Credo Ventures invests in Slovakia only one of the 250 business plan, while in the Czech Republic in one of the 130 (Andacký, 2015). Gradually, not only corporations but also the state itself becoming aware of the importance and benefits Startups in society-wide economic context.

In addition to a high degree of flexibility that can be considered as one of the essential characteristics of this form of business, the possibility of implementing their own ideas and independence are essential in terms of motivation factors to start business. Significant benefits can also be identified from a macroeconomic point of view for whole countries. It can say that startups contribute to increasing the productivity, competitiveness and economic growth of economies. New ideas and innovations have a positive impact on job creation. Successful projects are making Slovakia's reputation abroad, thus positively affecting the possibility of creating strategic partnerships between scientific, academic teams as well as researchers from the private sector at national and supranational level. Active and healthy startup ecosystem encourages domestic and foreign investors, positively affects the progress of individual sectors, education and developing a skilled workforce as well as cross-border scientific cooperation.

Big Companies

Linking startups to big companies is not in today's economic space unusual. Can be identified the two basic levels of interconnection. First, we are often faced with a situation where corporations work on their innovative projects, often just by creating their own startups companies. This follows from the requirement of maintaining a high innovation potential of the company as well as efficiency in project management. One of the interesting examples of
practice like that is the Google company. The second level interconnection of corporate with startups is the concept of business accelerator. The term accelerator we call "body to which startups entrepreneurs enter and leave it as a group of people passing through well-defined and time-bound exercise program, usually three to six-month, to provide financial support for the business plan at the end of the program (SBA, 2015)". Incubators have importance especially in the process of starting a business. In addition to funding it is mainly about the experiences from the firm's practice. In the world are business incubators already compulsory element of startup ecosystems. Among the best known are: Startup Bootcamp (EU), Seedcamp (London), YCombinator (Silicon Valley) Startup Yard (Czech Republic). In Slovakia, the incubators are just at the beginning. The first initiative have been started by creative space The Spot (Bratislava) as the Spot Booster - first comprehensive accelerator program for startups in Slovakia. This is the accelerator, which is also part of a consortium of European accelerators: The CeedTech.

Government and Supporting Organizations

State support of startups is based on the Operational Programme Research and Innovation, which was approved in 2014 by the Slovak Government and subsequently the European Commission. Its main objective is: “to create a stable environment conducive to innovation for all relevant actors and help increase the efficiency and performance of research, development and innovation as an essential pillar to boost competitiveness, sustainable economic growth and employment” (Pitoňák, 2015). Among the various tasks of the Operational Programme Research and innovation aimed at supporting startups include (Pitoňák, 2015):

- Encourage increased competitiveness of existing SMEs through the promotion of innovative products and services and applying new business models in the business.
- A comprehensive and systematic support for businesses during their life cycle.
- Generate SMEs with growth potential which can cooperate with scientific research institutions and utilize the results of scientific research process in business practice.
- Implementation of specific measures aimed at a combination of financial support, expert advice, creating conditions for the introduction of alternative forms of entrepreneurship, social innovation and so on.

Financial and non-financial support for setting up and managing startups from an institutional perspective is also provided by Business Slovak Agency (SBA). It's the oldest institution supporting small and medium enterprises in Slovakia. SBA currently, in cooperation with the Centre of Scientific and Technical Information (CVTI SR) is working on the implementation of the National Business Center (NPC), which "will be a one-stop-shop providing a broad portfolio of services for beginners as well as experienced entrepreneurs, creative and innovative people who are contemplating commercialization of their idea, but also for all enthusiasts who want to learn more from the world of business (NPC, 2015)." Creation and implementation of NPC is also supported by European Union through structural funds as a part of the project: Support to the establishment and development of national business center in Slovakia I. Stage. The main task of the NPC will "offer a wide range of services such as financial support and advice, non-financial services, technology transfer, education,
opportunities for networking at conferences and seminars as well as workshops and FabLab Creative Point (NPC, 2015).” Startups support can be identify also at civil and community level. Specific supporting organizations in Slovakia are: Startup Camp, civic association Startup Slovakia or startup community portal Startitup.sk.

**Business Incubators and Coworking Spaces**

Business incubators compared with accelerators are much more spread across the country and can be considered as an important element of whole ecosystem. Their role in the system is to support startups at the beginning phase as well as the subsequent startup management. Most often cover the first phase of the project defined by three-year period during which incubator creates access to basic needs for better (compared to commercial) conditions. The big advantage of incubators is integration of all services in one room. Namely: technical equipment, office space, use of postal addresses, and more. In addition to material conditions, the integration of the startup team into a business incubator provides a wide range of intangible benefits. The main benefits include: access to the new contacts and the high level of interaction between members of other participating companies. Business incubators often organize various lectures, seminars and workshops. Incubators beside material conditions create a community of people with common interests (SIEA, 2015). In Slovakia currently register 24 coworking spaces, of which the most in Bratislava (10) and Košice (4) (Bednár, 2015). Among the largest incubators in Slovakia include:

- The Spot (Bratislava)
- Connect (Bratislava)
- University Technology Incubator (Bratislava)
- Technology Incubator STP (Žilina)
- Eastcubator (Košice)
- Startup Center TUKE (Košice).

**Universities and Cooperating Organizations**

Important part of the startup ecosystem are also cooperating institutions and universities. Again, it is necessary to emphasize a low intensity in terms of cooperation with these components of the startup ecosystem compared with other, especially western countries. For comparison, in the United States are leading universities such as MIT or Stanford integral part of similar ecosystems. In European terms similar initiatives are just starting up. An interesting example is the Technical University in Berlin, supports the creation of dozens of new startups per year. Their support dedicated since 2007, when in workshops evaluated the business plans of students. Activities in the business center involving 50 experts to assist students in establishing and managing startups, seeking capital or acquiring government grants (EurActiv, 2012). However, it must be objectively noted that the trend of cooperation with the universities environment is positive. This trend can be documented by specific cooperation in Slovak startup practice:

- Initiative Technical University in Košice in the form of Startup TUKE center.
- Establishment of an incubator: Research Centre of the University of Žilina.
Cooperation of the Faculty of Management (Comenius University in Bratislava), other Slovak universities and Slovak Business Agency in organizing events Startup Sharks roadshow in which students, beginning and experienced entrepreneurs had the opportunity to meet and discuss with investors and mentors from Silicon Valley.

University technology incubator: Slovak Technical University in Bratislava.

Working together civic association Startup Slovakia and Comenius University in Bratislava in organizing training (Startup Course) which was designed for beginning startupers.

Funding organizations

Obtaining sufficient financial resources can be classified as a fundamental precondition in terms of establishing startup business. In quantitative research, we identified the most used sources from which startupers are starting their projects. Besides the basic forms such as: own resources, family and friends or business angels, it’s necessary to say that in the ecosystem are also state institutions providing external financial resources. State provides funding for startups primarily by financial programs. These have the character of credit and capital products and are managed by the Slovak Business Agency. Loan products are in the form of microloans. Capital products are funds. Namely: Innovation and Technology Fund (investment resources of the Fund for Innovation and Technology of structures SBA represent the volume of 4.2 m. Euros), (Andacký, 2015) Slovak Growth Capital Fund and the Slovak Development Fund. Other financing options for small and medium-sized start-up businesses is Horizon 2020 which is oriented to fund prototypes, research grants, projects and exchange programs. Last but not least in financing startups come into consideration: Grant programs for businesses and public sector, Slovak Investment Holding (SIH), energy audits and clusters provided by Slovak Innovation and Energy Agency (SIEA).

Research in Slovak Startup Environment

The research was conducted on a sample of 33 startupers by questionnaire method. Distribution of the questionnaire was carried out in the physical as well as electronic form. Research question is: Which factors are the most important in terms of creation and implementation of competitive advantages of startups in the Slovak startup environment? The questionnaire consisted of three main parts. At first we investigated the importance of selected factors of creating competitive advantages in terms of startupers. In the second part, startupers had opportunity to comment on selected topics related to solved issues. In the third part, we are interested in demographic characteristics. In the evaluation of the research were used statistical methods (average) and their means of graphic representation (pie chart). The questionnaire confront startups with selected factors arranged in four sections. Our goal was to identify which factors are considered in relation to enhancing competitiveness and creating competitive advantages in Slovak startup environment as the most important. Respondents were asked on a scale from 1 (least important) to 10 (most important) by personal experience to evaluate the selected factors. Selection of individual factors within sections was based on expert opinion, mentors and founders of business incubators, managerial literature and electronic resources as well as own knowledge.
and experience. We have chosen the following categories of factors: marketing factors, factors of human resources, legal and financial factors, strategic factors.

Results

After evaluation of respondents answers, the results in the individual sections are arranged in tables. Based on the results we can identify those factors startupers consider the most important in each section.

In section Marketing factors five following factors have been chosen (table 1). Startupers considered the most important factor in marketing communications (information technology) with an average of 8,242, while the least significant in existing demand in the market: 7,152 in average.

<table>
<thead>
<tr>
<th>Product / Service</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product / Service</td>
<td>8,091</td>
</tr>
<tr>
<td>Research and development (innovations)</td>
<td>8,061</td>
</tr>
<tr>
<td>Brand building</td>
<td>7,727</td>
</tr>
<tr>
<td>Marketing Communications (Information Technology)</td>
<td><strong>8,242</strong></td>
</tr>
<tr>
<td>The existing market demand</td>
<td>7,152</td>
</tr>
</tbody>
</table>

Table 1 Average values in the section marketing factors

Source: own research

Human resources factors. Among human resources factors we again chose five factors. (table 2). Startupers considered the most important factor team and the ability of its members by an average value of 8,821, while the least significant in support mechanisms - business incubators, mentors and advice with an average of 5,893.

<table>
<thead>
<tr>
<th>Team and the ability of its members</th>
<th><strong>8,821</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and training</td>
<td>7,142</td>
</tr>
<tr>
<td>Relationships with suppliers and subscribers</td>
<td>7,321</td>
</tr>
<tr>
<td>Networking</td>
<td>7,25</td>
</tr>
<tr>
<td>Support mechanisms - business incubators, mentors and advice</td>
<td><strong>5,893</strong></td>
</tr>
</tbody>
</table>

Table 2 Average values in the section human resource factors

Source: own research

Financial and legal factors. In section financial and legal factors, we have selected five factors (table 3) relating to the financing and legal protection of startups. From them, startupers clearly considered the most important factor in the harmony between the team and investors to achieving an average value: 8,212, while the least important factor considered to government
incentives and subsidies to the average value of 4,532. That factor reached from all the factors observed in all sections the lowest value. It follows that the assistance from the state startupers don’t perceive as a factor with significant impact on the creation and implementation of competitive advantages of startups.

Table 3 Average values in the section financial and legal factors

| Own sources of capital to start the business | 6,333 |
| The use of patents and intellectual property protection tools | 5,394 |
| The availability of external sources of financing | 6,848 |
| Harmony between the team and the investors | 8,212 |
| Government incentives and subsidies | 4,532 |

Source: own research

Strategic factors. Among the strategic factors, we have selected the following 5 factors (table 4). Startupers considered the most important factor: the strategy (design and implementation) with an average value of 8,515, while the least important thought of cooperation with universities and research facilities with an average value of 5,363.

Table 4 Average values in the section strategic factors

| Biznis model | 8,152 |
| Biznis plan | 7,697 |
| Strategy (formulation and implementation) | 8,515 |
| Strategic partnerships with corporations | 6,303 |
| Cooperations with universities and research facilities | 5,363 |

Source: own research

Additional question in section: financial and legal factors related to the method of financing and supporting startups is awareness of state financial support between startupers. On the issue of startupers awareness about the possibilities of implementation of structural assistance through the state funds and subsidies, we found (chart 1) that up to 58% startupers not have sufficient informations about its availability of financing by this resources. On the contrary, only 3% of respondents have already used these forms of aid.
The most commonly used resources to start the business were between startupers following forms (chart 2). The most widely used source of funding are own resources (58%). The second most widely used sources of funding (in seed stage of business) in Slovak startup environment are business angels (18%).

In the last part of the questionnaire, respondents were given the opportunity to openly state the biggest obstacles in term of setting up startups in Slovakia. The most frequent answers are summarized below (chart 3). Almost half of the respondents cited the greatest barrier bureaucracy related to the establishment of companies in Slovakia.
Part of the quantitative research was to identify basic demographic information to enable us to understand the structure of the current startupers according to the characteristics such as: gender, age, education level and education background. Chart 4 points to 85% of men compared with 15% of women in startup businesses.

Chart 5 describes the age structure of current startupers. Up to 67% of those questioned startupers were aged 18-26 years, suggesting increased interest of young people in this type of business.
Furthermore, we have dealt with educational level of active startupers. Chart 6 shows that startupers usually have a Master’s degree (49%).

Chart 6 Startups by education

![Pie chart showing the distribution of educational levels among startupers. 49% have a Master’s degree, 24% have a Bachelor’s degree, 15% have a Doctoral degree, and 12% have a High-school diploma.](chart6)

Source: own research

Chart 7 shows that actual startupers are mostly educated in informatics (34%) and management/economics (30%).

Chart 7 Startups by education background

![Pie chart showing the distribution of education backgrounds among startupers. 34% have an education in informatics, 30% in management/economics, 21% in chemistry, 6% in mechanical engineering, 3% in law, 3% in design, and 3% in mathematics/physics.](chart7)

Source: own research

**Summary of Main Findings**

Conclusions identified by primary research are:

- Slovak starter is predominantly male, aged 18-26 years, with a university degree with a focus on computer science or economics and management.
- Slovak starter most often fund their project from their own resources.
- As the biggest obstacles to setting up startups in Slovak startup environment startupers consider bureaucracy.
- Slovak starter is not sufficiently informed about the possibilities of drawing support in the form of state funds and grants.
- The most important marketing factors for startups are: marketing communication and product and service offered.
The most significant factors related to the human resources for startupers are: team and the skills of its members and relationships with suppliers and customers.

The most important legal and financial factors for startupers are: harmony between the team and the investors and the availability of external sources of financing.

The most important strategic factors are for startupers: strategy (formulation and implementation) and business model.

Low level of intensity in cooperation with the university environment and big corporations.

Conclusion

Despite the increased interest in startup companies in recent years, it should be noted that the Slovak startup environment is still in its early stages. It can be seen as a young, dynamically developing system composed of several cooperating organizations. Compared with other countries, however, the intensity of mutual relations and cooperations is lower. Identification and implementation of new competitive advantage is for every startup imperative of success. In this article we have tried to identify the components of Slovak startup environment. Furthermore, we named the most important factors that have a direct impact on the creation and implementation of competitive advantages. Identification of key factors can in practice help startupers to focus attention and their resources on what is important for the development, implementation and maintenance of competitive advantages. We also outlined the problems which we meet in our ecosystem. Based on the understanding of the large amount of benefits that a functioning and prosperous startup environment brings not only for its members but also for the whole country we believe that it’s so necessary to continue actively support young people starting startup and create conditions for the continuous development of the ecosystem.

Acknowledgment

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References


Abstract: The paper deals with diversity management in a modern company. Therein applied theoretical knowledge of all aspects related to diversity management and equal opportunities in the labor market in the European Union. The authors point out the management of diversity as a source of inexhaustible opportunities means to achieve higher economic growth as well as enrichment and the humanization of society through improvement of human relations. Equal opportunities seen as a set of attitudes and practices that promote the labor market in order to eliminate the negative impact of labor employed and the effective use of the positive potential of its diversity.

Key words: management of diversity, globalizácia, globalization, equal opportunities

JEL classification: J1, J71, M54

Introduction

There are various opinions regarding cultural diversity in companies. It may either be regarded as a source of opportunities and a tool, which leads to more effective solutions, or, on the other hand, a source of conflicts, misunderstandings and different expectations. Those advocating cultural diversity perceive it as an unlimited source of opportunities and a means to achieving a higher economic growth as well as enrichment and humanization of society as a whole, by improving human relationships. On the other hand, those against diversity predict inequality, social polarization and an increase in violence and terrorism being the outcome of diversity.

Cultural diversity describes age, social and racial variety. It is important to observe its positive and negative effects on work effectiveness, its impact on the work environment, and the way a company reacts to workforce diversity. It is mostly larger corporations with branches in different countries (Dell, IBM) that are open to cultural diversity and consider it a source of inspiration, creativity, innovation and mutual enrichment. If the company has set a goal, the cooperation of a culturally diverse team can help achieve it more efficiently as diversity creates new approaches and viewpoints. Equal opportunity management is known as a collection of approaches and practices that are applied in the market in order to eliminate the negative impact of employing a heterogeneous workforce and efficiently using the positive potential of its diversity.

However, some companies are not open to employing culturally diverse people, as they are afraid of change, untraditional impact on the work environment or cultural and language barriers. Unclear communication, different perception, contextual and non-verbal understanding can be the cause of conflict in the workplace and attribute to a lower morale along with a generally negative atmosphere in the workplace, which can manifest itself through lower productivity, hindered progress as well as lowered competitiveness of the company. It depends on the management how it deals with the challenge of working with a diverse
workforce and how much effort it makes to implement changes in the company in order for it to be open to new strategies and practices. However, a clearly defined set of principles has to be in place in order for it to be possible to effectively achieve the company’s goals. It is crucial that the management foresees and prevents cultural prejudice, which comprises different accidents and conflicts in the workplace caused by one group thinking it’s better than the other.

Companies and diversity management

Entrepreneurial environment is an environment where companies operate. This environment is shaped by local conditions as well as transregional and global factors. Companies that are able to adequately adapt to changes in the competitive environment are those that become successful. The behaviour of entrepreneurs is, to some extent, determined by economic, globalizing, cultural and environmental forces influencing individual regional organizations.

An increasing number of companies are currently crossing the regional border with their activities and are trying to expand their operations in the international environment. Market economy organisations are open systems. They exist and evolve by interacting with the environment, which influences their entrepreneurial and personal activities. However, managers must plan systematically, increase their managerial skills and improve their ability to quickly and accurately identify changes and react to them. It is also important that human resource management reacts to employment changes in international companies and create equal opportunities for employees.

A company is defined as international at a point, specified by various criteria (number of countries the company is active in, international revenue, international profit and qualitative criteria (management’s attitude towards the company philosophy, trade policy principles etc.)). Qualitative criteria that define whether a company is international are when international activities play an important role in achieving company goals. Many companies would seize being fully functional within days without some of their processes in the international environment. The definition of international environment can be understood as “all international transactions – private and governmental, which are carried out between two or more countries”.

Companies active on the international field have diversified markets with a greater probability of demand for goods and services at their disposal. An increasing number of companies have been taking advantage of this fact over the past decade. Even geographically distant environments are becoming more accessible, logical processes are sped up and communication with partners takes place in real time and without delay. In other words, the world is becoming more globalized. With a complex term, which „globalization” is, the question whether it is even possible to define such a complex phenomenon comes to mind.

Globalization is not a clearly defined statistical variable which can be directly measured (such as GDP), or indirectly measured (such as population aging and migration), which makes this phenomenon harder to define. For the purposes of this study, the term globalization shall be understood as a „versatile synthesis of a significant amount of various factors – economic, social, technological etc., which are hard to locate in common statistics. Globalisation is a process whereby a fast increase of individual economies and social systems is present along with their interdependence“. (COMMISSION OF THE EUROPEAN COMMUNITIES. 2009)

As a scientific discipline, management has an interdisciplinary character, because it integrates the knowledge of psychology, sociology, and economy, education, along with technical and natural disciplines into one unit. Based on that, new knowledge is created, which can then be
used to increase the efficiency of company operations. (PIŠKANIN, A. a kol., 2010) The term management is equivalent to the term directing. It is usually used to describe directing a whole unit, or a unified company operation. (VETRÁKOVÁ, 1996)

An important part of modern management is diversity management. Organisations should not only adapt to changes, but also act proactively in order to stay competitive on the market. Diversity management is an approach, which focuses on the equality of opportunities in the life cycle of an organisation. It relates to general management, builds on organisational behaviour and relates to the culture of the company. Diversity projects can have many levels and phases and it is important to use various models of their implementation. When improving diverse working conditions with the aim to achieve the best possible results, management should link to leadership: “Much better results can be achieved when change is not directed, but led”. Change requires that techniques and strategies are adapted to a specific culture and people within the company.

Globalisation processes highlight the importance of considering various factors of cultural diversity. Employing specific groups of people increases staff diversity in the company which is often perceived negatively. Refusing diversity leads to many conflicts in companies, prejudices towards some employee groups and hiring discrimination together with discrimination during specific processes of the company. Detailed knowledge of the various aspects of cultural diversity enables managing it more efficiently along with a more effective approach to maximising diverse workforce potential. Improving the ability to recognise and accept diversity attributes positively to eliminating misunderstandings, supporting communication and retaining the competitive advantage of the company.

Expanding the labour market in Europe enables the workforce to migrate a search for job opportunities abroad. In order to increase this mobility and achieve the full potential of the free movement of the workforce, additional effort is required. Formal effort – creating equal opportunities and equal conditions for employees of all nationalities. Companies that are dealing with employees with different nationalities increasingly often, should adapt to these circumstances and implement specific changes within the firm in order to take advantage of this type of migration. The importance of education and migration policies focused on solving the problem of insufficient skilled workforce differs on the national level. It all depends on the level of education and the share of domestic workforce in each EU member state as well as the migration history and the ability of the individual country to deal with migration.

The understanding of the term diversity has been changing since the 70s, when it was being used mainly with regards to minorities and women at work. Constitutional amendments from 1974 and 1975 enabled the US government to start pressuring companies to employ a higher percentage of minorities and women in order to increase their career advancement chances.

Employers were mainly employing people from minority groups, i.e. groups with a small representation within the company, in order to achieve increased efficiency in achieving company goals. Many employers were simply not ready for a change in the workforce structure, which impacted their companies negatively. Minorities were unable to advance in their careers at the expected rate, fluctuation was gradually increasing and the overall employee and firm satisfaction was deteriorating.

One of the newer trends in management approaches, diversity management, treats the differences between employees as positive and wanted, as the company has the means to use employees with various skills, life experiences, knowledge and interests to improve teamwork. Diversity management leads to greater tolerance personal differences and evaluating the
workforce based on age, gender, nationality or ethnicity. It is an organisational approach, which prioritises the aspects of heterogeneity and equality rights during the hiring process, remuneration and education.

In order for the company to deal with certain differences and to profit from diversity, it must first acknowledge, respect and accept it. It should then find strategic solutions which will help perceive and use diversity to the overall benefit of the company and increase of competitiveness. The management must correctly estimate the level of diversity that will lead to an increase in competitiveness along with the one to potentially harm the company.

Diversity management focuses on integrating the thought and method of supporting diversity in management and the processes of the company. Equal treatment and respect for diversity are an essential part of every individual in society. The term diversity management is based on respecting and leading a heterogeneous workforce in society. Diverse work groups have potential to develop the economic, creative and innovative potential of each individual within society, and to ultimately achieve better performance and results using the synergistic effect.

**Equal opportunity**

The term equal opportunity is understood as all human beings being able to freely develop their skills and taking advantage of opportunities without permanent restrictions, which would present a barrier to entry on the economic, social and political life of society. Equality of opportunity is considered a basic human right. It also involves the equality of opportunities for disabled people.

It represents the effort to focus on creating conditions that improve the chances of equal inclusion of people into the social environment and to ensuring equal access to public goods and services for all.

One of the main attributes of a democratic state should be the effort to create a legislative framework, which would ensure dignified conditions for all citizens and guarantees their basic rights. One of them is the right of all human beings to freely seize any opportunities, without permanent restrictions, which are connected to gender roles or any barriers to economic, political and social life in society based on gender.

An important document of the EU Committee in the field of human rights is the European social charter from 1965. Based on the resolution of the Committee no. 33/1993 the Slovak Republic is considered an interested party in the European Convention on human rights and basic freedoms along with all its amendments and protocols since 1.1.1993. People are born free and equal in their rights. It also represents the will for them to live and act in unity.

Ethnocentrism has the tendency to judge different cultures, their habits, traditions and values from the perspective of the person’s own culture. People of all cultures are convinced that only the norms, traditions and rules of their culture are right and true. This perspective is, however, highly intolerant to people of different cultures, since these are judged based on criteria that are not natural for the given culture, and thus are not suitable. On the one hand, ethnocentrism is a mechanism, which supports group and culture integrity, supports an individual’s identification with the values and norms of the group they are a part of. On the other hand, it complicates interaction with people of different cultures.

Gender equality means equal handling and participation of both genders in all areas of private and public life with the aim of fully integrating both men and women.
Gender stereotypes are simplified, unrealistic perceptions of “masculinity” and “feminism”, idealized and expected models, which are present in all areas of life. With their repetition, they create a false sense of being natural. They are created and supported by social structures such as: family, education, culture, traditions, ideas and habits, religion, media and language.

An equal right is a broader strategic goal of the EU, focused on all resident groups. It is particularly focused on equal opportunity between men and women (gender equality). To effectively enforce equal opportunity and gender equality, the EU uses structural funds. Based on a Council (EC) directive no. 1083/2006 s. 16, all EU structural fund co-financed projects “support equality between men and women and employ gender equality”, as well as prevent “any discrimination based on gender, race or ethnicity, religious beliefs, disability, age or sexual orientation during the individual stages of fund intervention, especially during their usage.” (PAWERA, R - ŠMEHÝLOVÁ, Z., 2015)

The EU is trying to fight against gender inequality. It has set clear goals, which are desired to be met by 2020. These goals follow the Committee’s strategy for gender equality (2010-2015). In the pact Europe 2020, it confirms the EU obligation to lessen employment differences, education and social protection, equal remuneration for equal work, support equal participation of women in positions of power and fight against all forms of violence against women.

In order to effectively apply the equal opportunity ideology, it is important to take legislative action and remove any possibility of gender discrimination in a legal manner. It is also important to initiate new supporting institutional mechanisms, ensuring equal opportunities. The new, modern approach of gender mainstreaming is a concept, which describes a systematic integration of the needs of men and women into all policies and measures, with the aim of ensuring gender equality with respect to their differences and interests.

Active involvement of the EU towards gender discrimination was also reflected in the Amsterdam treaty, which amended the treaty of Rome in the respective area in art. 2 to include a role of supporting male and female equality. The activities of the Association in this area are described by art. 3 of the Treaty. In all subsections of article 3, the Association takes it upon itself to eliminate inequalities between men and women. Article 13 of the Treaty orders the Association and the Council to act in a unanimous manner upon the motion of the Committee and, after consulting the Parliament, to fight against discrimination based on gender, race or ethnicity, religious beliefs, disability, age or sexual orientation. Article 141 of the Treaty makes it the EU member states’ agenda to ensure an equal remuneration for men and women for the same work or work of equal value. This means calculating the reward for project-based work using the same rate as well as using the same hourly rate for time-based work. Sub-section 3 in article 141 of the Treaty enables EU member states to introduce measures, providing advantages for the underrepresented gender in succeeding in their professional career, or prevention/compensation for disadvantages in a professional career with the aim of fully ensuring equal treatment of both genders.

The highest wage gap between men and women is present in industry, construction work and services in countries such as the Czech Republic, Slovakia and UK (19.5-25.5% difference in 2010). Women in these countries, on average, earn much less than men, with these differences being possibly caused by an insufficient amount of women in management and other, highly paid positions. On the other hand, Sweden, Slovenia and Bulgaria have the lowest wage gap (4.4-15.8% difference in 2010). Women in these countries have higher than average opportunities for work, especially in services, where they earn an almost the same as men. Even areas such as industry, usually dominated by men, are also available and well paid to women.
In order to increase the efficiency of equal opportunity implementation, it is advisable that its application and institutional enforcement are anchored not only on the governmental level, but also on a local and regional level. In this sense, and example of a complex, institutional enforcement on all levels would be the EU member states - Norway, Austria, Germany, France and Italy. A National committee of equal opportunity is an example of how this problem is tackled in Italy. The role of this Committee is to create conditions that support equal opportunities and eliminate gender discrimination in the workplace. In order to support the enforcement of the previously mentioned principles, Italy has created Equal rights Committees on three levels – the Central Committee for employment, the Regional Committee and the District Committee. The ministry of Family and Children in Norway is connected to independent governmental bodies – the equal rights Ombudsman and the equal rights Committee. The equal rights council is the joining mechanism between statutory organs, organisations and the public. It acts as an advisor to the equal rights Committees, situated near the civic offices.

**Conclusion**

Many managers are currently bias towards minority employees. They do not create equal work opportunities in the areas of employee care, remuneration and competence delegation. They often discriminate potential candidates based on gender, nationality, race, age, political opinions, religion, sexual orientation, some physical aspects or disabilities. This paper dealt with the role of diversity management in the modern firm. Some solutions were highlighted, which help understand the problems that significantly help a firm prosper in the competitive environment of the real market.

**References**


Diverzita [online].[cit. 01-03-2016]. Available: <http://multikulti.sk/pojmy/diverzita.html>


*Rodové stereotypy* [online],[cit. 05-03-2016]. Available: <https://genderideologia.wordpress.com/vysvetlenie-pojmov/rodove-stereotypy/>

*Riadenie zmien* [online],[cit. 04-03-2016]. Available: <https://managementmania.com/sk/riadenie-zmien>

*Rovnosť príležitostí* [online],[cit. 25-02-2016]. Available: <https://pietruchova.wordpress.com/moja-expertiza/rodove-treningy/>


Importance of Effective Leadership: German Insights in Czech context

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Abstract
The aim of the article is to emphasize the importance of effective leadership for the organization as a tool for creating a competitive advantage. This article derives from a research from German organization operating in the Czech Republic. The research ran from April to August 2015. Research results have shown that various areas of organizational culture affect the job performance, but the major factor is the leadership. Lack of clear style of leadership and the principles of ethical leadership may bring long-term problems, even in a stable profitable organization offering premium products.

Keywords: Leadership, Job performance, Ethical leadership

JEL classification:

Introduction

The importance of a strong organizational culture is nowadays more and more emphasized and represents an important element related to the prosperity of an organization. (Schein, 2010, Remišová, 2012). It gains more attention due to the growing competitive fighting between organizations. Organizations start to be focused more on the functionality of the internal processes in terms of long-term sustainable values. Organizations realize that the success and prosperity lie in constant values, attitudes, norms, positive role models of behaviour and subsequent activities of managers that directly affect job performance which has influence on the quality-level of offered products or services. What if an organization proves positive economic results, but has problems in organizational culture and in constant values?

It is obvious that mainly managers contribute to the creation of strong organizational culture (Schein, 2010). They are responsible for first pulses of creating the working environment, for definition the values of the organization and subsequent recruitment of people who are active holders of these values. It is important to note that active holders of organizational values such as commitment and initiative, are not still monitored by the manager, can work independently and still stay honest, are integrated and can achieve desired working results. This connection is achievable through ethical leadership. An example would be a successful company Apple, where Steve Jobs (Isaacson, Jobs, 2011) was active holder of value „high performance” and spread this value as a role model to his subordinates who naturally tended to have a high performance. It is therefore in the organization, respectively on managers which values they follow and which values are reflected in their behaviour, what is further linked to the thinking and behaviour of subordinates in the form of performance. What happens in organizations with unclear style of leadership? How this kind of manager’s behaviour can affect selected areas of
organizational culture? Could Ethical style of leadership solve problems in the organizational culture?

This article brings a picture of concrete prosperous organization which is facing problems in organizational culture. The analysis proved that leadership has the greatest impact on other areas of the organizational culture. The article also brings a picture of a concrete way how behaviour and leaderships influence other areas of organizational culture in terms of the quality of job performance.

Methodological insights

Research carried out in the German organization operating in Czech environment offering premium quality products. The organization had repeatedly met with procedural errors that were difficult to identify through modern technologies. Such serious errors brought a lot of dissatisfaction from customers and frequently appearing complaints. The situation was very serious, especially for the organization of differentiation strategy with a strong focus on quality. The high-quality of products was naturally reflected in the price level, so each disappointed customer was huge loss for organization. Therefore, the organization decided to analyze 6 selected areas of organizational culture (history, relationships between employees, leadership, attitude to quality, professionalism, teamwork and learning from mistakes) as a possible tool for the quality-improvement of job performance. Improvement in job performance is closely related to the quality of the organization’s processes.

The main research object was to identify the areas of organizational culture, which contribute most to the problems in job performance. The low job performance has naturally impact on low quality of outputs (products). Another target of analysis was the comparison of opinions of selected representatives from the organization in terms of organizational culture.

The main research methods were: workshop where was used brainstorming to clarify the possible areas of organizational culture, observation and structured questionnaire. The questionnaire was analyzed according to the key-word method where we received first results. First results were interpreted to managers on the workshop. After the second workshop there was needed the deeper analysis. The deeper analysis was conducted by causal maps where we were looking for relationship between: the visible behaviour, concrete problem and the reason of the problem. After this analysis we got final results which were presented to Czech and German managers. Before the start of our research we did analysis of internal documents of the organization (results of employees’ satisfaction from recent years, documents about the objectives and values of the organization) and used the Hofstede’s theory of cultural dimensions.

The Hofstede's theory (Hofstede, 2006) was chosen on the basis of a clear and distinct definition of cultural differences in organizations. Therefore it was the appropriate instrument for understanding the cultural differences between Germany and the Czech Republic and then realizing which areas could be part of the organizational culture. The only cultural difference,
according to Hofstede's theory, was in the dimension of power of distance, reflected by the Czechs as high (stronger emphasis on position in society, greater distance between managers and employees, employees are more controlled, the managers are mainly responsible for decision-making process). The higher power of distance is also connected with level of formality. It is important to distinguish formality in the form of relationships (The manager has the greatest competence and requires obedience from his subordinates, he is always right), which is characteristic rather for the Czechs and formality in communication (Formal way of talking, conversation is not focused on personal problems and etc.), which is characteristic rather for the Germans. This comparison helped us to understand better the cultural differences in Germany and Czech Republic.

Then, it was needed to identify concrete areas of organizational culture which we wanted to analyze. The final choice of these areas of organizational culture was preceded by a two-day workshop where took part the German manager of quality and Czech manager of Human resources. Firstly, there were presented the cultural differences between Germany and Czech Republic according to the Hofstede’s theory. There was also short discussion about the internal documents. Then, we used brainstorming and wrote on the blackboard all possible areas which could be a part of organizational culture. On the end of workshop we have chosen areas, which could lead to the non-quality of job performance. The selected areas were: history of the organization, the relationships between employees, leadership, attitude to quality, professionalism, teamwork and learning from mistakes.

According to these areas, a structured questionnaire was created which consisted of 20 open questions. The questionnaire was divided into categories based on selected areas of organizational culture. Respondents involved in a structured interview were selected on the basis of demographic model of the organization. Overall, there were created four main groups of respondents: board members mostly consisting of German members, management mostly consisting of Czech employees, regular employees and workers.

As was already mentioned, there were open questions in the questionnaire. The answers were evaluated by key-word method. This method is choosing selected expressions from the answers and connects those which are same, relevant to the question, opposite and not relevant. Afterwards we got first results which were presented to managers at the workshop. At the workshop managers worked in groups together and discussed about the topic. We received circa 30 potential concrete and possible problematic areas. After the workshop it was needed to find possible relations between them. There was used casual map. We distinguished areas which were visible behaviour, real problem and the reason of the problem. The concrete final results are described in the following chapter.

**Results**

The main research question was to identify the main areas of organization culture which have the greatest impact on job performance in terms of quality.
Research results have shown that all the selected areas of organizational culture (history of the organization, the relationships between employees, leadership, attitude to quality, professionalism, teamwork and learning from mistakes) have an impact on the quality of job performance; but the leadership has the greatest impact. Another important finding was that the management has a direct impact on other selected areas of organizational culture. Research also declared that especially management contributes to potential failures within the quality of job performance in the organization. In following paragraphs we would like to describe in detail how exactly management influence other selected areas of organizational culture.

First selected area of organizational culture was history. We would like to describe the connection between management and history. First of all, the management is responsible for building the history, stories and traditions of the organization. There were a number of changes in the organization in previous years that were initiated mainly by the management. One of significant changes was related to the connection of Czech and German brands. Economic results demonstrated that it was a wise decision, because the organization has great progress and has a stable position on the market. However, the research results were not so clear, because some respondents actively participated in the building of the previous (originally Czech) brand. The connection with German brand has brought economic growth, but Germany is in dominant position now. There is therefore a noticeable identification problem (in Czech) with the current German brand that is primarily oriented on quality.

The management also determines the level of professionalism in the organization as it decides what kind of people work in the organization. As was already mentioned there was a number of changes in the organization, mainly initiated by the management. Other very significant was related to frequent changes of board members what caused an unclear mindset orientation. The organization has presented itself as family and also multinational company in recent years. If the current orientation and direction of the company is not clear for the top management, it is impossible to be clear for people involved in the organization. As a result of these changes (frequent changes of board members and main orientation) there were created different mindset of strategic orientations. The Czech Republic is more oriented on social responsibility of the employer, where the company supports a long-term employment, provides social security in the form of stable working conditions. This approach is also presented in Germany, but the organization with the differentiation strategy with strong focus on the quality, sees the priority in high level of job performance, which is a guarantee of high quality products.

Managers are active holders of professionalism in terms of professional knowledge, education skills and the professional behaviour. It is therefore clear that the German view of job performance is more demanding, that is why the required level of professionalism in Germany is higher than in the Czech Republic, causing misunderstanding between German and the Czech view of high job performance. The same opinion brought also the publication from Schroll-Machl and Nový (Schroll-Machl, Nový, 2015). The Germans naturally expect high performance and are dissatisfied with the Czech level of professionalism. Czechs feel "pushed around" by the Germans and promote more social value. The different perception of the level of professionalism (quality of job performance) goes hand in hand with the actual level of job performance of employees. Germans are more demanding in job performance already in the
process of recruitment, which can provide a greater number of highly professional people, which brings a higher quality of products and higher customer satisfaction (fewer complaints). The lower level of professionalism (lower level of job performance) on the Czech side delivers less professional employees, what is connected with the lower quality of products by comparison with German’s point of view.

Professionalism is closely related to the other selected area of organizational culture – the learning from mistakes. The lower level of professionalism causes frequent errors, lower quality products, which causes customer dissatisfaction and complaints and it is occurred more on the Czech side.

As was mentioned above, the management has direct impact on professionalism. Professionalism also determines the level of mutual relationships at the workplace, which is closely related to communication and teamwork. If there is a high level of professionalism and the employee does not only have professional skills (knowledge and education), but also professional behaviour what means he/she does not take into account the level of relationships to job performance and therefore he/she is able to work independently and uninterested. Research has shown that bad relationships have negative impact on communication and make the teamwork impossible.

Research also declared that the required level of professionalism is not clearly established. It can only be concluded that the level of professionalism in Germany is higher than in the Czech due to a lower error rate of products, higher customer satisfaction and fewer complaints.

**Conclusion**

The research declared that the management is most responsible factor for failures in terms of quality and leadership has the greatest impact on the performance in terms of quality.

If the leadership style is not clear, the company could face long-term problems, even if the company is profitable at the moment. It seems that effective leadership is inevitably linked to ethical leadership. (Armstrong, Stephens, 2008)

Ethical leadership (Pickett, 2005, Johnson, 2012, Lašáková, Remišová, 2009) starts primarily from managers, their inner personal values. In our case it is important to pass self-reflection and clarify the values such as justice, honesty, humanity, credibility and objectivity, also for the German board members and for the Czech management. The commitment to the above-mentioned values is naturally reflected in the behaviour of managers. Managers play significant role, because they define, explain, communicate and engage employees to the changes related to the organization. This principle would be the appropriate way how to build a missing trust between the board members in Germany and Czech management. Trust and cooperation can be built through the common definition of the direction of the organization, which is currently different for Germany and Czech. Important is to start with greater involvement and engagement of Czech managers to strategic issues and understanding the need and necessity of high level of professionalism. This procedure will ensure that both parties understand the expectations of the other and determine a clear direction. Clear direction affects the behaviour
and leadership style where managers act as role models for their employees (principles of ethical leadership). Ethical leadership ensures greater professionalism among managers, which is carried forward to the employees. Greater professionalism can eliminate problems in relationships (in case of negative sympathy we are willing and able to communicate and collaborate with others) to support communication and teamwork.

Ethical leadership represents clear instructions to resolve the discrepancy between the main strategic orientations in the Czech Republic and Germany. Ethical leadership gives the employee a faire valuation. Ethical leadership is able to ensure job security of employee, which may focus primarily on high job performance and is not motivated by fear. Ethical leadership style is able to build such relationship between managers and employees, which is based on trust. (Remišová, 2012).

The application of Ethical leadership is not easy; it must begin with self-reflection of managers and with awareness of ethical values and ethical behaviour. (Remišová, Lašáková, Rudy, Sulíková, Kirchmayer, Fratričová, 2012).

In our case the Germans have to consider the Czechs as equal partners and show them the confidence and involve them in the processes. Czech managers by applying the principles of ethical leadership (be a positive role model) can also understand and provide the required level of professionalism and mainly support professional behaviour among the employees. (Cameron, 2012). These principles can eliminate problems in relationships, encourage communication and promote teamwork.

References


Development and functioning of the banking system in Slovak Republic

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Abstract
Banking system in Slovak Republic originated and was shaped after formation of the Slovak Republic. Its functioning represents the skeleton of country’s entire financial system. From a certain perspective, it can be considered as the main part of the economic development. Limited functionality and at worst case scenario a collapse of this system can significantly affect the functioning of the economy. It is important that this system is accurately described, controlled and regulated. This paper focuses on the development of the financial market in Slovakia, a description of the functioning of key institutions in the banking system. Another section is supplemented by a horizontal analysis of functions in relation to the transfer of competence and responsibilities within the system hierarchy. The aim of this paper is to closer examine the existing central banking institutions in Slovakia and the European Union.

Keywords: banking system, the National Bank of Slovakia, European Central Bank, the financial system

JEL Classification: G14, G15, G20, G21

Introduction
Slovak republic is a country, which largely depend on foreign demands. The greater part of industry in Slovak republic is export oriented and softening of demand in those industries is a great risk for banks operating in Slovak republic. This paper describes banking system in Slovak republic and is focused on central bank of Slovakia – its function and importance.

Slovak banking system
In Slovak republic there is two stage banking system. The first stage is a central bank and the second stage is commercial banks. In the Slovak republic the first stage is represented by National Bank of Slovakia.

Commercial banks – functions
According to Slovak law, the bank is a legal entity that accepts deposits, provides loans and has a banking license. The bank can be simply described as a profit – based financial institution that accept deposit from general public and transfer these funds from bank to another person/institutions and earn profit.

In addition to primary function the commercial banks may have some or all of the secondary function according to their banking license. Bank may function as a representative or agent on behalf of their customers. Banks collect cheese, drafts, bills of change, make payment for their client, purchase and sell securities, shares and debentures, send money according to their customer wishes.
Commercial banks also function as a provider of locker facilities to its customer for safe custody of jewelry, securities, legal documents, gold, money and other valuables. Banks can invest funds on behalf of their clients and make profit for both of them. Banks collect necessary and useful statistics, give references for their customers, deal in foreign exchange, provide electronic banking and issue letters of credit. Banks are highly useful during natural calamities. They collect funds and donations to provide help for people in need. (Sysakova & Slahor, 2010)

**Commercial banks - statistics**

In the present, there are 27 commercial banks operating in Slovak republic. The first group consists of 13 banks that are established in Slovak republic. The biggest are Vseobecna uverova banka, a.s., Slovenska sporitelna a.s. and Tatra banka, a.s.. The second group are branche Offices of Foreign banks. In the following graph we can see the quantity development in time of the Commercial and saving banks and the Branch Offices of Foreign banks. (Narodna banka Slovenska, 2016)

![Graph](image)

**Fig. 1. Development in time of Commercial banks in Slovak republic**

In 2015 the net profit in bank sector was 629 mil. EUR. According to statistics published by Slovenska bankova asociacia (2016) the net profit is 13 % higher than the year before. Profit in bank sector has a positive tendency for the last 5 years and it is likely that in the next years it can exceed its so far maximum from 2011.
More than two-thirds of profit is created by the net interest income. Persisting decline in interest rates and growth of loans was a major cause for rise in banks income. Around 70% of market in retail loans was covered by 4 largest banks. The European Central Bank reports low interest rates in the coming years and therefore it is expected that the household loans will continue to grow and the interest rates will reach its minimum. Upcoming changes of legislation will also contribute to higher growth of housing loans. Around 40% of all new loans was provided for the purpose of refinancing loans recieved from other banks. It is expected that in the 2016 it will grow even higher. (Narodna banka Slovenska, 2016)

Table 1: Vertical and horizontal analysis of profits in banking sector

<table>
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<tr>
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<tbody>
<tr>
<td>Net interest income</td>
<td>1562</td>
<td>1680</td>
<td>1807</td>
<td>1759</td>
<td>1814</td>
<td>1901</td>
<td>1859</td>
</tr>
<tr>
<td>Net fee and commission income</td>
<td>404</td>
<td>450</td>
<td>466</td>
<td>465</td>
<td>481</td>
<td>495</td>
<td>530</td>
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<tr>
<td>Net trading income</td>
<td>31</td>
<td>63</td>
<td>101</td>
<td>30</td>
<td>82</td>
<td>93</td>
<td>96</td>
</tr>
<tr>
<td>Other operating income</td>
<td>-0.2</td>
<td>2</td>
<td>173</td>
<td>-7</td>
<td>257</td>
<td>-173</td>
<td>-149</td>
</tr>
<tr>
<td>Dividend income</td>
<td>27</td>
<td>26</td>
<td>83</td>
<td>34</td>
<td>37</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Operating income</td>
<td>2025</td>
<td>2217</td>
<td>2428</td>
<td>2281</td>
<td>2157</td>
<td>2341</td>
<td>2370</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>1209</td>
<td>1173</td>
<td>1182</td>
<td>1339</td>
<td>1204</td>
<td>1231</td>
<td>1225</td>
</tr>
</tbody>
</table>

(Slovenska bankova organizacia, 2016)

Central Bank in Slovak republic – National Bank of Slovakia

National bank of Slovakia was established on 1 January 1993. Its foundation was extremely important, especially in terms of becoming independent from Czech republic. In the early beginning there was monetary union with Czech republic that was supposed to last six months. However, the negative expectations of the Slovak crown on financial market and massive outflow of capital to Czech republic forced early introduction of Slovak crown on 8. February 1993. (Chudjak, Lekova, & Hallon, 2014)

Since 1 January 2009 National Bank of Slovakia (NBS) has become member of the Euro system. National Bank of Slovakia operates independently from government. It is one of core principles of all central banks in Euro system. Independency is necessary because central bank creates money and this function can be a great temptation for any government. Government with that much power could reduce government debt by reducing interest rates or printing more
money but from the long run aspect it can negatively affect inflation and economy as a whole. Ensuring price stability represents one of most important tasks of National bank of Slovakia.

National bank of Slovakia is a legal entity not profit based, funded from its own resources and is not connected to the state budget. It is governed by Bank Board of 6 members – appointed by the government for the duration of 6 years. National bank of Slovakia is a member of the European System of Central Banks (ESCB) and implements in Slovak republic European monetary policy.

ESCB respects traditions and differences between its members and so it is decentralized system. It makes major decisions and leaves many details to be dealt with according to its guidelines of the national central banks. European central bank (ECB) is governed by the Governing Council, consisting of 6 members of Executive Board and the governors of all national central banks of the euro area countries. It carries only a few operations but focuses on ensuring that decisions made by ECB Governing Council is implemented by national central banks of countries of the euro area. NBS as a member of ESCB can affect policy for euro area.

In addition to the implementation of decisions of ECB the other most important function of NBS is to supervise domestic financial market. NBS is monopoly in controlling currency in circulation and bank reserves. It can make demands of commercial banks and sets conditions under which they can borrow money from ECB. Also it can affect loans for households and firms by setting conditions and interest rates by which commercial banks can borrow money. It is important that the financial market is sound and has credibility for the sake of customers and all national economy. NBS supervise the distribution of cash throughout the country so the cash is where it is actually needed. It arranges the printing of new banknotes and mining of coins, replaces and destroy unsuitable cash. Also the NBS infinitely exchange former Slovak crown for euro.

The NBS is also a key institution in payment systems and securities settlement system in Slovakia. It is operator of these systems and also contributes to the adoption and implementation of rules and standards.

NBS makes statistics and projections of development of economy and main macroeconomics indicators for Slovak republic. It is presented on ECB meetings and it contributes to monetary policy for the next period. General public can access its library and reading room.

Giving opinions, drafts and decrees concerning currency, payment systems, the banking, pension and insurance sector is also one of the important functions of NBS. It is an expert in legislative process and can significantly contribute to the drafting of laws. It is also a technical assistant especially useful for other countries in preparation for adopting euro. NBS organizes seminars and attends conferences in Slovakia and abroad. NBS provides information to the public on request. General public or financial consumers may contact the NBS with complaints. (Narodna banka Slovenska 2015, 2015)
References


How to help to more Cloud Adoption in SME companies using Cloud Certification C88

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Abstract

In present days we face the rapid growth of newly established cloud services which the potential users can choose from. These services are for different purposes and the non-IT users do not know the exact criteria why, how and what to choose. The poor or not enough sufficient knowledge of tools for evaluation may lead to the wrong purchasing decision and further problems with data protection, vendor lock-in, higher price level than expected, non fully understanding the contract terms, etc. [3]. Recent European Surveys show lack of awareness and necessary knowledge in SME Companies. In EU more than 95 percent of SMEs are with less than 10 employees and these companies cannot afford to have own well educated IT staff maintaining own on-premise IT. They just have to buy services in IT (and business) area. Those companies are more or less forced to rely on their own knowledge and marketing information and believe to the sales people of potential vendors. In EU there are many certification schemes, that evaluate cloud services from different points of view. Once the cloud service has achieved some level of certification, the user has possibility of easier orientation on the (dynamic growing) market of cloud services. Goal of this article is to present the possibilities of increasing the trust in cloud services, trust in this revolutionary way of delivery of Hardware and Software services, which is nowadays ready for almost every company. The role of the cloud broker will be explained.

Keywords: Cloud Service, Certification, Audit, Migration to the cloud, Compliance

JEL classification:

Main Body

Today we are facing the situation that many SME companies are trying to move into the cloud and to discontinue using their own on premise solutions. They already understood that moving into the cloud can bring them “Enterprise level of IT for affordable cost”, with putting off many risk factors but the process of choosing the right cloud services for their business is quite a hard job, there is lot of hidden traps which the user can fall in. The main buzzword in this situation is the Trust in Cloud [7]. On the first level a normal user does not know all the technological features and potential obstacles that can arise during the normal operation and on the second level that the contracts provided by a cloud service provider is (very often) not easy to understand and the customer does not exactly know what is behind this contract. The (sometimes) desperate customer cannot easily move to the cloud because of lot of questions that need more detailed answer before migration into the cloud. The flood of advertising is rapidly growing and it becomes much harder to choose the right service. To answer those
(complex) questions to a normal non-IT potential customer need qualified help or some appropriate tool. But how to use them? [1]

First step should be to choose the right person of trust who will work on his behalf to achieve his best. This trusted advisor, so called a cloud broker, which should choose the best for his client and for the best possible price. The cloud broker should be able to speak the “language of his clients”, understand the business of the client and explain them (i.e. to the Management of his client) easily what their expectation can be, what they must accept and for what level of services they will have to pay. Without the knowledge of the client business it can be quite difficult and ineffective to move the client into the cloud.[2]

The new approach for cloud services obtaining is that the certificates (or audit seals) will be used in the decision process. This certificate is kind of a guarantee that the cloud services possessing this certificate have a certain level of quality and many aspects meet the given criteria. The cloud certification was done by experts and auditors and the customer does not need to evaluate all criteria again, it can save time and money.

In the past periods only the security and operations topics were checked while others were not treated as relevant. But with the rapid development of cloud technologies and much higher acceptance, those questions are much relevant than before. During the audit phase the questions regarding compliance, data protection, security, disaster recovery scenarios and contractual terms are assessed.

The primary question is the use case for what purposes I will use the cloud service. There is a different approach if I will use the service as a private person or as a company (even very small). This is unfortunately very often mixed and from the security point of reasons it is not a good situation. When the customer data are compromised and can be misused it is already too late and the lower prices of cloud services are not worth the risk. Unfortunately there is lot of customers which can prove this…but it was too late.

If the business is using some cloud service as a “vital service for the business” the requirements for this service should be much higher because each disruption can cause a serious business problems like lost of reputation, losing customers, money, etc. The disruption is not only that the service will not work due to technical problems, but there can be also contractually allowed disruption due to change in contract like pricing model, access restrictions, regular maintenance, etc.

The new European Audit scheme is called StarAudit. [8] According to audited scope the results can be 3 to 5 Stars. If the cloud service has achieved at least 3 stars, we can say that the mentioned service has 3 stars audit. The 4 and 5 Star-Audits are much more expensive, take longer time but the effort pays off in much higher acceptance. For normal cloud services offered by small companies the 3 stars may be enough. It depends always on the concrete use case.

Evaluated aspects of cloud services (below are explained the most critical topics)

Profile
  • General Information
- Physical Data Location Customer Data
- Service Management
- Extended Company Profile
- Reference Information about the Cloud Service
- Certifications

**Contract and compliance**
- Adequate contract terms
- Rules for Data Management
- Contractual Data Privacy requirements
- Service Level Agreements
- Terms in case of bankrupt
- Terms for pricing and cost allocation

**Security and Data Privacy**
- Security Management
- Technical Security
- Technical data privacy measures
- Data integrity
- Auditability

**Operations and infrastructure**
- General DC assessment
- Access control
- Area and environment assessment
- Resilience
- DC Operations

**Operations processes**
- Customer Support
- Service Management
- Data backup processes
- Quality assurance

**EU Data protection regulations**

This is very hot topic and still under development, there is no common European Legislation for this, but only national regulations instead. This makes the development of Cloud services much more difficult. The EU Commissioner Vivienne Reding mentioned already in 2012 on her Keynote speech on EuroCloud Congress in Luxembourg that EU will not create the “European SuperCloud”, but will prepare the legislation which will enable using of various clouds. The last development is that new GDPR will be in place since 2018 and EU will strictly insist on sticking on them.
Legal Compliance

This is vital part of all cloud services which handle the various types of data. Compliance of cloud service means that the mentioned service meets the standard criteria for operating. Here belong for instance the minimum data retention period, disaster recovery time, maximum downtime, auditability, etc. The bigger company means there are bigger requirements from auditors.

Contractual terms, SLA

The contractual terms are one of the most difficult issues in the process of obtaining cloud services. For the normal user (non-expert) it seems OK when it works like described, but there may be a lot of problems when some exceptional conditions occurs. There are some chapters in contract written in “small fonts”, which the normal customer could not understand. Signing it without understanding can really lead to big problems in the daily business. For example when the cloud service provider is allowed to move the sensitive data outside EU, have longer maintenance that agreed in SLA (service level agreement), change the version of various components without informing the customer, etc.

Continuing after bankruptcy

The big issue in cloud computing (and fear of potential cloud customers) is that after bankruptcy of cloud provider the normal operation is stopped and the normal legal process starts which means no normal operation of daily business. This is big hurdle for companies having their mission critical data and applications in a cloud. For this the special legislation is necessary that will ensure that the data and applications of customer do not belong to the bankrupt company and that this company must operate the normal daily business so that customer operations are not stopped because it can lead to disaster in his business. The first EU country which has this legislation implemented is Luxembourg. This already brings many big international companies into Luxembourgian data centres.

To be sure that the chosen provider is right for the client it is good to know about his history, employees, economical condition to avoid bad surprises during operation.

Conclusion

To move into the cloud means that the responsible persons should be aware of all risks a potential problems that can hamper their business. The migration into the cloud is a process which must be perfectly understood and planned and there should be also “plan B” available that means what to do if something fails, how to operate under these changed conditions, because business will “punish” unprepared (or unsolved) IT solutions and problems. The methodology for “Transfer to the cloud” is one thing but the real circumstances must be always taken into account. This new approach to the cloud certification is EU-based and has lot of followers worldwide.
References

Peter Balco, Michal Greguš: The implementation of innovative services in education by using cloud infrastructure and their economic aspects, Global Journal of Flexible Systems Management. - ISSN 0972-2696. - Vol. 15, Iss. 1 (2014), pp. 69-76


Cloud Migration, Tobias Hoellwarth, 2014, Rakúska

IT Control Objectives for Cloud Computing, ISACA, 2011, USA

Security, Audit and Control Features SAP ERP, ISACA, 2009, USA

Web: https://eurocloud-staraudit.eu

Web: http://www.trustincloud.org

Web: https://resilience.enisa.europa.eu/cloud-computing-certification

Relationship Between Organizational Culture and Its Strategy

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Abstract
The paper deals with the organizational culture and strategy of an organization, their relationship and linking the findings with practice. The objective of the paper lies in theoretical defining of the relationship between the phenomena in order to identify their interaction in real life. The data come from the research conducted in five selected institutions providing medical care in the Slovak Republic. The dimensions of the organizational cultures in question and strategic management process stem from the questionnaire findings and institutional materials. The contribution of this paper results in identifying the relationship between the organizational culture and the organization’s strategy as theoretically defined and enabling management’s behaviour to be more efficient.

Keywords: organizational culture, strategic management process, dimensions

JEL Classification: M140

Introduction
A considerable amount of literature has been published on the organizational culture and the strategy of an organization. However, many of these studies have focused on them separately, e.g. The Significance of Organizational Culture by Oliver (2011) or Operations Strategy by Adamides (2015). Other studies have connected them to the different areas, e.g. The Influence of Organizational Culture on Organizational Effectiveness by Kim (2010) or Linking Marketing Strategy and Company Performance by Virvilaite at al. (2011). Despite the fact and taking into consideration that Miles and Snow (1978) theoretically defined the relationship between organizational culture and strategy of an organization decades ago, only few studies have concentrated directly on the interaction between them and have linked the findings with practice (e.g. Organizational Culture and Knowledge Management Strategy by Mojibi (2015)), especially in non-profit organizations providing medical care like hospitals.

The main aim of the paper is to present the findings of the study investigating the interaction between the two phenomena, i.e. the organizational culture and the organization’s strategy in real life in selected institutions providing medical care. The paper is divided into four parts. The first part deals with the methodology of the conducted research in connection with the theories of the organizational culture and the strategy of an organization. The second part presents the data collected during the research. The last parts focus on identifying the relationship between the phenomena and the results interpretation.
Methodology
Generally, a variety of methods are used to assess an organization’s culture and strategy. The research was based on qualitative analysis in order to gain insights into the both very complicated areas of an organization’s functioning. The data come from a survey (15 questions) conducted with CEOs of five selected organizations providing medical care in the Slovak Republic. Institutional materials of these organizations were the second source of information. Organizations were selected very carefully, taking into account the degree of their homogeneity based on the long-term history of each of them. It is an important factor for the stability of culture and the stability of approaches to the strategic management process.

Firstly, we focused on the process of strategic management in the organizations as it was theoretically defined covering its four steps (Papula – Papulová 2010):

1. analyses of an environment
2. strategy formulation
3. strategy implementation
4. strategic control

Each step includes specific procedures (Figure 1) which were carefully analysed, e.g. using qualitative and quantitative methods during analyses of an environment; specific ways of creating vision and mission; setting goals; duration of plans; strategic evaluation; etc. These specific parts of the strategic management process were specified for each organization in order to compare the results and link them to the results of organizational culture analyses.

In the second step we analysed the organizational culture of each selected organization. Each culture can be represented by dimensions. Dimensions are the characteristics of culture. They
represent one way how to understand and analyse culture. Seven dimensions by two famous authors were selected (Šajgalíková – Bajziková 2013):

1. Universalism versus Particularism by Trompenaars,
2. Individualism versus Communitarianism by Trompenaars,
3. Specific versus Diffuse by Trompenaars,
4. Internal Direction versus Outer Direction by Trompenaars,
5. Long Term Orientation versus Short Term Orientation by Hofstede,
6. Power Distance Index by Hofstede,
7. Uncertainty Avoidance Index by Hofstede.

Each dimension for each organization was identified. Dimensions express only the tendency to their specific extremes (e.g. tendency toward individualism or tendency toward communitarianism). Few dimensions were identified as neutral in some organizations due to this fact.

The next step was to combine dimensions of the organizational culture with specific procedures in the strategic management process and to analyse the potential relationship between them. Totally 39 connections were found and analysed in 5 selected organizations.

Table 1 depicts the example of the relationship between dimension "Uncertainty Avoidance Index" and Strategic Control as a part of the strategic management process. The top half of the table shows the tendency of the mentioned dimension in organizations. The bottom half of the table shows the approach of organizations to the strategic control. The first line in the top half is linked with the first line in the bottom part and we assume the consistency between them in accordance with the theory. There is a relationship between these two characteristics in the organizations no. 1, no. 4, and no. 5 (O1, O4, O5 in Table 1) and there is no relationship in the organization no. 2 (O2 in Table 1). It was not possible to define if the organization no. 3 (O3 in Table 1) uses strategic control, so it was not possible to identify the relationship.

<table>
<thead>
<tr>
<th>Organizational culture dimension</th>
<th>O1</th>
<th>O2</th>
<th>O3</th>
<th>O4</th>
<th>O5</th>
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<tbody>
<tr>
<td>Strong Uncertainty Avoidance Index</td>
<td>x</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Uncertainty Avoidance Index</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
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</table>

**Table 1: Relationship between dimensions and strategic management process**

<table>
<thead>
<tr>
<th>Characteristic of strategic management process</th>
<th>O1</th>
<th>O2</th>
<th>O3</th>
<th>O4</th>
<th>O5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy evaluation is a part of a strategic control</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Strategy evaluation is not a part of a strategic control</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**Discussion**

There are several ways and many different perspectives for defining the relationship between organizational culture and the strategy of an organization. Sometimes, strategy is considered to be more important than culture and vice versa. For example, Judith Rodin, Rockefeller Foundation CEO (2012) argues that “Culture Eats Strategy for Lunch”. On the other hand,
Mayat (2012) claims that “It’s not really strategy vs. culture, but an aligned strategy and culture that matter.” It is supported also by The McKinsey 7S Model by Peters and Waterman (1980). It shows how important their interlinking is. Shared Values presented by the organizational culture are in the middle of the model connected with the other elements. Strategy is one of these elements. Figure 2 presents the model and links among all elements.

The study perceives the two phenomena as “partners” as well and strives to find out if and how they are interlinked and influence each other. As mentioned above, totally 39 interlinks were found and analysed. Each of them linked theoretically defined characteristics of cultural dimensions with theoretically defined procedures in the strategic management process.

Figure 3 depicts that out of the total 39 interlinks, 34 of interlinks (87.18%) confirmed the relationship between the organizational culture and strategy of the organization and only 5 of interlinks (12.82%) did not confirm the relationship.
These study findings support the data previously published in literature and confirm the theoretically defined relationship between the organizational culture and the strategy of an organization in profit organizations as well as in non-profit organizations like hospitals.

A limitation of this study is a small sample of participated institutions. Future research could be conducted in more institutions in order to gain more representative results. Another limitation of this study is that information come from similar sources (survey conducted with CEOs and internal materials of organizations). It is recommended that further research should use more research methods, e.g. culture exploring based on interviews or surveys with employees or personal exploration of culture directly in organizations and then to combine the data from the used sources.

**Conclusion**

The main goal of the study is to identify the relationship between the organizational culture and the strategy of an organization. The theoretical background of the study is focused on the dimensions of the culture and the strategic management process. The study findings come from two sources – from the survey conducted in five medical institutions in the Slovak Republic and from other documents of the selected organizations.

Dimensions of the organizational culture and steps of the strategic management process were analysed for each organization individually. The study confirms the theoretical findings of the cited authors and confirms strong relationship between the organizational culture and the strategy of an organization. Out of 39 identified interlinks, 34 of them confirmed the relationship.

Although the study is based on a small sample of organizations, the findings show the major relationship between phenomena and the importance for future practice. The CEOs of the organizations in question asked for the results of the study in order to discuss them and introduce the necessary changes to enable the management’s behaviour to be more efficient. The findings of the study have not only theoretical but also practical study meaning.

It would be interesting to compare the results of the current study with the research conducted in organizations in future (if possible). The foreseen research is planned to use wider variety of techniques for analysing culture and strategic management process to be even more representative.

**References**


Theoretical approaches to public support of renewable energy sources

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Abstract

The contribution targets public support to renewable energy sources and provides an overview of theoretical background of regulatory interventions. Whether to continue public support to renewable energy sources or not as well as the optimal form of support are very relevant questions in the current policy debate in the EU and Slovakia. Public interventions such as support schemes were necessary to start investments into renewable energy technologies. Some authors argue in favour of state interventions into energy market in order to achieve goals of sustainability and security of energy supply while others think that market should be left alone. It is important to optimise regulation in order to maximise the outcome and minimise negative impacts. An effective and well balanced regulation requires a good understanding of market functioning, possible market barriers and market failures. Main theories dealing with adequacy and suitability of market interventions are theories of market and regulatory failures and regulatory theories. Infant industry argument, entry barriers theory and free-rider problem can also be applied to renewable energy support. The contribution analyses theoretical approaches to regulation and identifies their application to the support of renewable energy sources.

Key words: market failure, non-market failure, theories of regulation, barriers to entry, renewable energy sources

JEL Classification: Q43 Energy and the Macro-economy

Introduction

Renewable energy can be produced from a wide variety of sources including wind, solar, hydro, tidal, geothermal, and biomass. By using more renewables to meet its energy needs, a country lowers its dependence on imported fossil fuels and makes its energy production more sustainable. The EU has one of the most ambitious frameworks to support RES that led to one of the most impressive increases in RES capacity and production in recent years. Some forms of RES were questioned regarding their impact on fighting climate change and improving sustainability. Public support to renewable energy sources and its form are very relevant and debated questions. That is why this contribution analyses theoretical approaches to regulation and regulatory risks as well as identifies their application to the support of renewable energy sources. Several authors addressed regulatory interventions and their justifications in their work.

Theories of Market and Regulatory Failures

Market Failures

The market mechanism works effectively only in conditions of perfect competition. There are many factors that disturb market functioning in the real life. The result is the imperfect functioning of the price system with impacts on the efficiency in utilization of production factors. The economy produces under the production possibilities curve pointing to an inefficient functioning. Market failure is a situation in which the allocation of goods and
services is not efficient. There exists another possible outcome where an individual may be made better-off without making someone else worse-off; the outcome is not Pareto optimal. Pareto efficiency represents an economic state where resources are allocated in the most efficient manner. Pareto efficiency is obtained when a distribution strategy exists where one party's situation cannot be improved without making another party's situation worse. Market failures can be viewed as scenarios where individuals' pursuit of pure self-interest leads to results that are not efficient – that can be improved upon from the societal point of view (Ledyard 2008). Market failures can be mainly divided into four groups: imperfect competition, positive and negative externalities, public goods and asymmetric information.

According to Krugman and Wells (2009) market failures are situations where a third party intervention could improve the outcome for one party without limiting it for the second party in case we are not speaking about a Pareto optimal situation – a point where it is impossible to make anyone better off without making someone worse off.

Krugman and Wells (2009) identify three major types of market failures:

- **Market monopolisation.** Any structural grouping in contradiction to a perfect market principles falls into this category. Examples include: monopoly position on the market, cartel agreement or other market splitting agreements.

- **Externalities.** A consequence of an economic activity that is experienced by unrelated third parties. An externality can be either positive or negative. Pollution emitted by a factory that spoils the surrounding environment and affects the health of residents is an example of a negative externality. An example of a positive externality is the effect of a well-educated labour force on the productivity of a company.

- **Information asymmetry.** A situation in which one party in a transaction has more or better information compared to another. This often happens in transactions where the seller knows more than the buyer, although the reverse can happen as well. Potentially, this could be a harmful situation because one party can take advantage of the other party's lack of knowledge. Improvements in the information and communication technologies decrease asymmetric information as more and more people can easily access all types of information.

- **Public good** is another example of market failure. This concept emanates from a theory elaborated by Paul Samuelson (1954). In economics, a public good is a good that is both non-excludable and non-rivalrous in that individuals cannot be effectively excluded from use and where use by one individual does not reduce availability to others. Public goods include for instance air, national security, common language(s) and street lighting. A non-excludable good is a good whereby it is not possible to exclude people from using the good. Some goods which we claim are non-excludable are not really non-excludable, in the sense that, at a certain cost, access to these goods can be restricted. Public parks, roads, and public infrastructure are sometimes viewed as non-excludable. However, public parks can charge an entry fee or restrict access based on other criteria by fencing themselves, and roads can operate on usage or toll taxes for pedestrian and motor traffic. A good is non-rivalrous if the use of the good by one individual does not limit the amount of the good available for consumption by others (Oliar 2006).
Many public goods may at times be subject to excessive use resulting in negative externalities affecting all users; for example air pollution and traffic congestion. Public goods problems are often closely related to the "free-rider" problem, in which people not paying for the good may continue to access it. Thus, the good may be under-produced, overused or degraded (Rittenberg and Tregarthen 2006). Public goods may also become subject to restrictions on access and may then be considered to be club goods or private goods; exclusion mechanisms include copyright, patents, congestion pricing, and pay television.

Above-mentioned examples demonstrate that there are situations where final price is different from Pareto-efficient price. These situations can justify state interventions into the market functioning. Governmental interventions also have their risks that is why it is important to understand regulatory failures.

**Regulatory Failures**

A government failure (or non-market failure) is imperfection in government performance (Orbach 2013). Building on the premise that the only legitimate rationale for government regulation was market failure, economists advanced new theories explaining why government interventions in markets were costly and tend to fail. For example, it was argued that government failure occurs when government intervention causes a more inefficient allocation of goods and resources than would occur without that intervention. Government failures, however, occur also whenever the government performs inadequately, including when it fails to intervene or does not sufficiently intervene (Orbach 2013).

Zemanovičová et al (1998) indicate several causes of non-market failures:

- Separation of cost-takers from benefits-takers leading to free ride problem.
- No connection between adopted regulatory measure and responsibilities for its enforcement.
- Influence of interest groups.
- Separation of costs and effects lead to increased and redundant costs resulting from X-inefficiency and rent-seeking behaviour.
- Limited information about consequences of decisions.
- Limited control over reaction of private sector.
- Limited control over bureaucratic apparatus.
- Political system limitations (preference of short-run policies).
- Internalities (norms and goals of non-market entities often contradict publicly presented goals).
- Derived externalities.
- Distribution inequality.

The idea of government failure is associated with the policy argument that, even if particular markets may not meet the standard conditions of perfect competition required to ensure social optimality, government intervention may make matters worse.

**Theories of Regulations**

Before identifying theoretical approaches to regulations it is important to define the term regulation. Several definitions proposed by various authors are presented in Table 1.
Table 1 Overview of definitions for the term "regulation"

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1. Den Hertog, 1999</td>
<td>Regulation is the use of legal instruments for the implementation of socio-economic political goals.</td>
</tr>
<tr>
<td>2. Orbach, 2013</td>
<td>Regulation as a state intervention into private domain that is an external impact of world imperfection and human limits.</td>
</tr>
<tr>
<td>3. Baldwin, Cave, 1999</td>
<td>Regulation can be understood in several ways: as a specific rulebook, as a state influence or as all kinds of societal control and influence.</td>
</tr>
<tr>
<td>4. OECD, 1997</td>
<td>Regulation represents a wide spectrum of tools that governments use to set conditions for companies and citizens.</td>
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According to Den Hertog (1999) regulation is the “use of legal instruments for the implementation of socio-economic political goals.” Baldwin and Cave (1999) indicate, that regulation can be understood in several ways: as a specific rulebook, as a state influence or as all kinds of societal control and influence. Orbach (2013) defines regulation as a „state intervention into private domain that is an external impact of world imperfection and human limits“. According to OECD (1997) „regulation represents a wide spectrum of tools that governments use to set conditions for companies and citizens. “ The aim of the regulation is to assure an effective distribution of resources. Baldwin a Cave (1999) define ineffective resource allocation as a situation where „unregulated market … for some reasons do not bring behaviour or products in line with public interest. “ The concept of allocation efficiency does not bring external costs and benefits into account.

**Positive and Normative Theories of Regulation**

According to Den Hertog (1999) in the theories of economic regulation, a distinction can be made between positive and normative theories. The positive approach is directed to the economic explanation of regulation and deriving the consequences of regulation. The normative approach investigates which type of regulation is the most efficient. The latter approach is called normative because there is usually an implicit assumption that efficient regulation would also be desirable.

**Economic and Social Regulations**

The division can also be made between economic and social regulation. Social regulation is a government intervention that addresses specific social problems, including pollution, product safety, worker safety, and discrimination. Economic regulations intervene directly in market decisions such as pricing, competition, market entry, or exit. Reform aims to increase economic efficiency by reducing barriers to competition and innovation, often through deregulation and use of efficiency-promoting regulation, and by improving regulatory frameworks for market functioning and prudential oversight.

Economic regulations aim at correcting market failures and bringing economic output into equilibrium. Den Hertog (1999) identifies theories of public interest; theories of private interest and Chicago theory of regulation. We explain a distinction between three types of theories of regulation: public interest theories, the Chicago theory of regulation and the public choice theories. The Chicago theory is mainly directed at the explanation of economic regulation; public interest theories and public choice theories envisage in addition to that an account of social regulation.
**Public Interest Theories of Regulation**

Public interest theory explains regulation from viewpoints not restricted to imperfect competition and unbalanced market operation. For a number of reasons, markets may not exist for some goods for which the utility or the ‘willingness to pay’ exceeds the production costs. Markets might not exist as a result of information problems and transaction costs in the case of external effects and public goods. In these cases, regulation can improve the allocative efficiency of the economy. In the first place, missing markets can be accounted for by hidden information or an asymmetric distribution of information with respect to prices, quantities or quality of goods (Hirshleifer and Riley, 1979). This public interest can be further described as the best possible allocation of scarce resources for individual and collective goods. In western economies, the allocation of scarce resources is to a significant extent coordinated by the market mechanism. According to public interest theory, government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results (Den Hertog 1999).

The critique questions the assumption of existence of market failures and/or the existence of an effective correction mechanism via creation of an artificial institution. In practice it appears that the market mechanism itself is often able to compensate for any inefficiency. In that way problems of adverse selection are solved by companies themselves. In the second place, the original theory assumes that government regulation is effective and can be implemented without great cost (Posner, 1974). So precisely the transaction costs and information costs, which underlie market failure, are assumed to be absent in the case of government regulation. This assumption has been criticized in both empirical and theoretical research.

**Private Interest Theories of Regulation**

The private interest theory also called the capture theory was developed mainly by political scientists and assumes that in the course of time, regulation will come to serve the interests of the branch of industry involved. For example, it is assumed that legislators subject the branch to additional regulation by an agency if misuse of the economic position of power is detected. In the course of time, other political priorities arrive on the agenda and the monitoring of the regulatory agency by legislators is relaxed. The agency will tend to avoid conflicts with the regulated company because it is dependent on this company for its information. Furthermore, there are career opportunities for the regulators in the regulated companies. This leads in time to the regulatory agency coming to represent the interests of the branch. World Bank studies (2004) point out that also an independent regulation can be ineffective or “captured” by private interests including the government. The opponents of the theory argue that regulation might be often beneficial to consumers and that much to the regulated industries.

**The Chicago Theory of Regulation**

“The Theory of Economic Regulation” by George Stigler (1971) was published in 1971 which marked a start of a theory of regulation called by some the economic theory of regulation (Posner, 1974) or the Chicago theory of government. The central proposition was that ‘as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit’. The benefits of regulation for a branch of industry are obvious. The government can grant subsidies or ban the entry of competitors to the branch directly so that the level of prices rise. In the second place, the government can maintain minimum prices more easily than a cartel. In the third place, the government can suppress the use of substitutes and support complements.
An example of support to complements is the subsidizing of airports for the benefit of airlines. A demand will therefore arise on the one hand for government regulation. The political decision-making process on the other hand makes it possible for branches of industry to exploit politics for its own ends. In the political decision-making process, interest groups will exercise political influence, as opposed to individuals. Individuals will not participate because forming an opinion about political questions is expensive in terms of time, energy and money, while the benefits in terms of political influence will be negligible.

Some groups can organize themselves less expensively than others. Small groups have the advantage because the transaction costs are lower and the ‘free-rider’ problem is smaller than is the case with large groups. Furthermore, in small groups the preferences will be more homogeneous than in large groups. Small groups also have the advantage in that for the same total yield, the yield per member of the group is greater. The fact that apparently large branches can still be well organized is explained by Stigler (1974) through concentration and asymmetry. The large companies in a concentrated branch will see themselves as a small group. In the case of asymmetry in the branch, for example as a result of product diversity or widely varying production techniques, separate companies will wish to prevent unfavourable regulation and will participate in the organization. The result of variation in the costs of organization is that producers organize more readily than consumers.

The Chicago theory of regulation seems primarily suited to the explanation of so-called economic regulation. Social regulation, the regulation in the area of safety, environment and health, seems at first sight to be less amenable to explanation by this theory. The criticism of the Chicago theory of regulation comes from the Virginia School of Public Choice (Rowley, Tullock, Tollison, McCormick et al. (2013). In their theories, "rent seeking" is a central feature. "Rent seeking" means the political activity of individuals and groups to devote scarce resources to the pursuit of monopoly rights granted by governments. The Virginia School criticizes the Chicago theoreticians for their disregard of the inefficiencies of regulation. With their emphasis on the inefficiencies of "rent seeking", the Virginia School practices mainly normative economic theory; behaviour and institutions are judged according to the degree of efficiency in the allocation of scarce resources.

**Barriers to Entry and Exit**

Before a firm can compete in a market, it has to be able to enter it. Entry can take many forms, such as investments in new industrial facilities, exports, trade licenses, joint ventures, strategic alliances, mergers and acquisitions etc. The entry of new competitors operates as a balancing force against high levels of industrial concentration and the abuse of dominant position by firms with large market shares. Entry increases supply, lowers prices, intensifies innovation and restores equilibrium in markets that don’t operate in a socially desirable manner.

Many markets have at least some barriers to entry, which are generally understood to be impediments that make it more difficult for a firm to enter the respective market. Various definitions of barriers to entry have been proposed in the industrial organization literature. Some authors have argued, for example, that an obstacle is not an entry barrier if incumbent firms faced it when they entered the market. Others authors contend that an entry barrier is anything that hinders entry and has the effect of reducing or limiting competition. Because the debate remains unsettled but the various definitions continue to be used as analytical tools, the possibility of confusion has lingered for many years. A barrier to entry does not have to prevent firms from entering a market forever in order to affect competition and consumer welfare;
sometimes just retarding the arrival of new firms is enough. An overview of definitions on barriers to entry is summarised in Table 2.

Table 2 Definition of Barriers to entry

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition of barriers to entry</th>
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<tbody>
<tr>
<td>Joe Bain, 1956</td>
<td>Entry barrier are anything that permits incumbents to earn above-normal profits without attracting entry. An entry barrier is an advantage of incumbents over potential entrants that can be measured by the extent to which incumbents can persistently hold their prices above competitive levels without attracting new firms to the market. Bain expressly identified absolute cost advantages as a barrier to entry.</td>
</tr>
<tr>
<td>George Stigler, 1968</td>
<td>Barriers are costs that must be borne by entrants but are not borne by incumbents.</td>
</tr>
<tr>
<td>Franklin Fisher, 1979</td>
<td>Entry barrier are anything that prevents entry when entry would be socially beneficial.</td>
</tr>
<tr>
<td>James Ferguson, 1974</td>
<td>Entry barrier are something that makes entry unprofitable while allowing incumbents to price above marginal cost and persistently earn monopoly profits.</td>
</tr>
<tr>
<td>Von Weizsacker, 1980</td>
<td>Entry barrier are a cost that must be borne by an entrant but is not borne by incumbents and that implies a distortion in resource allocation.</td>
</tr>
<tr>
<td>McAfee, Mialon and Williams, 2004</td>
<td>Entry barriers can be divided into two categories. Economic entry barrier as a cost that must be incurred by new entrants and that incumbents do not or have not had to incur. And an antitrust entry barrier as a cost that delays entry and thereby reduces social welfare relative to immediate but equally costly entry.</td>
</tr>
<tr>
<td>Zemanovičová at al., 1998</td>
<td>Divide barriers to structural barriers, strategic barriers and regulatory barriers and highlight regulatory barriers, especially in transition economies. Regulatory barriers to competition represent measures applied by the state administration that prevent or hamper effective competition from functioning and thus decreasing social welfare.</td>
</tr>
<tr>
<td>Gilbert, 1986</td>
<td>Entry barriers are revenues coming from the established position of the company on the market.</td>
</tr>
<tr>
<td>William Baumol and Robert Willig (1981)</td>
<td>An entry barriers are anything that requires an expenditure from a new entrant into an industry, but that imposes no equivalent cost upon an incumbent.</td>
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Joe Bain published in 1956 his book Barriers to New Competition where he presented the conclusions of the first thorough study on entry barriers. Entry barriers are anything that permits incumbents to earn above-normal profits without attracting entry. He contended that an entry barrier is an advantage of incumbents over potential entrants that can be measured by the extent to which incumbents can persistently hold their prices above competitive levels without attracting new firms to the market. Bain identified three key barriers: product differentiation, economies of scale and absolute cost advantages. His definition encompasses economies of scale and product differentiation, which appeared to be positively correlated with high profits. But a firm might be able to sustain supra-competitive prices because it has a better product or
because it is more efficient. Bain expressly identified absolute cost advantages as a barrier to entry.

George Stigler (1968) twelve years after Bain introduced a different view on barriers to entry. Rather than defining barriers to entry in terms of their effect, he argued that they are costs that must be born by entrants but are not born by incumbents. He considered as a barrier to entry the costs faced by an entrant firm that were not faced by an incumbent firm, without specifying what these costs are and how they can be measured. Under his definition, scale economies cannot be entry barriers, because entrants have equal access to technology and incumbents presumably encountered the same economies. The difference between Bain’s and Stigler’s definitions can be illustrated on advertising costs. If advertising is correlated with high profits, Bain would consider it an entry barrier whereas Stigler would not, as long as advertising is available to everyone on the same terms.

According OECD (2006) Stigler’s definition could be too narrow as it does not seem to recognize that in some circumstances it is more difficult for entrants to break into a market than it was for an incumbent that was the first firm to enter. For instance, when a market is already occupied by an incumbent potential entrant might face an entrenched brand, as well as demand that is insufficient to permit efficient operation. Nowadays it became generally accepted that sunk costs can be a source of entry barriers, but Stigler’s definition excludes them. Sunk costs are costs that a firm cannot recover, even if it withdraws from a market e.g. advertising expenses, license fees, or research and development costs. Both incumbents and entrants may need to pay sunk costs before entering a market. Sunk costs nevertheless can create a decisional asymmetry that is capable of deterring entry because incumbents have already paid them and entrants have not.

Franklin Fisher (1979) defined an entry barrier as anything that prevents entry when entry would be socially beneficial. But his definition does not give any guidance for identifying socially harmful impediments. Social welfare does not always overlap perfectly with consumer welfare, which is what competition agencies usually strive to protect.

James Ferguson (1974) defined an entry barrier as something that makes entry unprofitable while allowing incumbents to price above marginal cost and persistently earn monopoly profits. Some authors consider this definition too broad because it may include desirable factors such as superior quality and efficiency.

Von Weizsacker defined an entry barrier as a cost that must be borne by an entrant but is not borne by incumbents and that implies a distortion in resource allocation. His definition is similar to Stigler’s definition but the difference in cost must also reduce social welfare to count as an entry barrier. This leads to the result that entry barriers may actually serve a good purpose.

McAfee, Mialon and Williams divide entry barriers into two categories. First, they defined an economic entry barrier as a cost that must be incurred by new entrants and that incumbents do not or have not had to incur. Second, they defined an antitrust entry barrier as a cost that delays entry and thereby reduces social welfare relative to immediate but equally costly entry. They add dynamic element to definitions of entry barriers.

Zemanovičová et al. (1998) divide barriers into structural barriers, strategic barriers and regulatory barriers and highlight regulatory barriers, especially in transition economies. Structural barriers to entry arise from basic industry conditions such as cost, demand, and technology. Strategic barriers are intentionally created or enhanced by incumbent firms in the market for the purpose of deterring entry. Regulatory barriers to competition represent measures
applied by the state administration that prevent or hamper effective competition from functioning and thus decreasing social welfare.

Richard Gilbert worked with a term “mobility barriers”. Entry barriers are revenue coming from the established position of the company on the market. Sunk cost and economies of scale may make market exit difficult and in fact prevent companies from entering the market.

William Baumol and Robert Willig (1981) defined entry barriers as anything that requires expenditure for a new entrant into an industry, but that imposes no equivalent cost upon an incumbent. They argued that fixed costs and economies of scale do not necessarily belong to barriers to entry, but agreed with the view that sunk costs are a very important barrier. Later Schmalensee (2004) argued that the barriers to entry can be determined solely by sunk costs.

Infant Industry Argument

Renewable energy industry can be considered an infant industry in a sense that it needs to compete with established competitors that often benefitted from subsidies in the past e.g. nuclear power generation, in some countries also coal. According to Black (1997) an infant industry is a new industry, which in its early stages experiences relative difficulty or is absolutely incapable in competing with established competitors abroad. Governments are sometimes urged to support the development of infant industries, protecting home industries in their early stages, usually through subsidies or tariffs (Rushford, 2003). Subsidies may be indirect, as in when import duties are imposed or some prohibition against the import of a raw or finished material is imposed.

Application to Renewable Energy Sources

Renewable energy technologies have an enormous potential and based on some surveys that potential can be realized at a reasonable cost. But it is difficult to compete in markets distorted by subsidies, existing infrastructure and functioning. This was the situation at the beginning of the century when RES share was rather low. Both economic theory and experience point to significant market barriers and market failures that will limit the development of renewables unless special policy measures are enacted to encourage that development. These hurdles can be grouped into four categories:

a) failure of the market to value the public benefits of renewables;

b) commercialization barriers faced by new technologies competing with mature technologies and price distortions from existing subsidies and unequal tax burdens between renewables and other energy sources;

c) market barriers such as inadequate information, lack of access to capital, split incentives between building owners and tenants, and high transaction costs for making small purchases.

Market Failure(s)

Many of the benefits of renewables are public benefits to everyone (public good). For example, those who choose renewables reduce pollution and provide an environmental benefit to the public. A customer who is willing to pay more for electricity from renewables still has to breathe the same air as the neighbour who might choose not to pay more. Public goods do not motivate
everyone who benefits to pay for them, if they can choose to be "free riders" who benefit from
the contributions of others.

Energy market prices do not reflect all costs to society in terms of pollution, greenhouse gas
emission, resources' depletion, and geopolitical dependency. Therefore, end user (and producer)
choices are made on the basis of a lower energy price that does not reflect the environmental
costs for the society.

For these reasons, renewables will be unable to compete on a level playing field with
conventional generation until new policies are adopted to internalize the public costs of these
fossil fuel sources.

Commercialisation Barriers and Barriers to Entry

To compete against mature fossil fuel and nuclear technologies renewables must overcome two
major barriers to commercialization: undeveloped infrastructure and lack of economies of scale
(Moskowitz 1992). Developing new renewable resources will require large initial investments
to build infrastructure such as prospecting, permitting, installation, operation and maintenance.
In particular, the lack of qualified labour force is relevant.

Compared with renewables, nuclear and fossil fuel technologies enjoy a considerable advantage
in government subsidies for research and development. Harmful subsidies to fossil fuels and
negative incentives mainly in form of administrative or entry to the market barriers are other
challenges to the penetration of RES. The IEA’s latest estimates indicate that fossil-fuel
consumption subsidies worldwide amounted to $548 billion in 2013, $25 billion down on the
previous year, in part due to the drop in international energy prices, with subsidies to oil
products representing over half of the total. Those subsidies were over four-times the value of
subsidies to renewable energy and more than four times the amount invested globally in
improving energy efficiency. This is less problematic for the OECD countries but the latest
available figures from 2004 for the EU15 are still worrying: coal received €13 bn (to be phase
out at the latest by 2018), oil and gas €9 bn, nuclear €2 bn, and RES were supported only by €5
bn.

Renewable energy technologies face also considerable barriers in market transactions
(Moskowitz 1992). Customers may have insufficient information to make informed choices.
Because renewable technologies are relatively new, most customers know little about them.
Many customers, for example, may think that solar and wind technologies are unreliable
because they are available only when the sun is shining or the wind is blowing. They are
unlikely to be aware that these intermittent technologies can be highly reliable when combined
with other options.

Renewables projects and companies are generally small. Thus they have fewer resources than
large generation companies or integrated utilities. These small companies are less able to
communicate directly with large numbers of customers. And they are less able to participate in
regulatory or legislative proceedings, or in industry forums defining new electricity market
rules. Small projects have high transaction costs at many stages of the development cycle. For
example, it costs more for financial institutions to evaluate many small projects than one large
project. It also costs companies more to negotiate contracts with many small project promoters.

Renewables developers and customers may have difficulty obtaining financing at rates
available for conventional energy facilities. In addition to having higher transaction costs,
financial institutions are generally unfamiliar with the new technologies and likely to perceive
them as risky, so that they may lend money at higher rates. Since renewables generally require higher initial investments than fossil fuel plants, even though they have lower operating costs, initial costs are a considerable barrier to investments into RES. In many cases renewable energy projects are small scale and decentralised which increases the transaction costs and further slows down the uptake of financial products.

Renewables may also be charged higher network costs than conventional technologies or may be subject to other discriminatory grid policies (Moskowitz 1992). For example, a system that requires generators to reserve a block of capacity in advance may force a solar or wind, to pay for the maximum output they can generate at any moment. Most of the time, however, an intermittent resource generates at less than its maximum potential capacity. Since a wind generator produces, on average, only about a third of the time, it could have to pay three times more per kilowatt hour transmitted than a conventional plant designed to generate at full capacity all the time. Another problem is predicting the exact time and quantity of power for delivery, since wind speeds or sunshine can be difficult to predict more than a day or two in advance.

Conclusion

Public support to renewable energy sources is a very relevant theme in the current policy debate in the EU and Slovakia. Public interventions such as support schemes were necessary to start investments into renewable energy technologies. Some authors argue in favour of state interventions into energy market in order to achieve goals of sustainability and security of energy supply while others think that market should be left alone. Anyhow, to avoid distorting energy prices and the market however, these schemes should be time-limited and carefully designed. Industry and consumers alike are pointing at high end-prices as a consequence of public support endangering the competitiveness of our industry and affordability of energy to our citizens.

For an effective regulation/public support to RES it is important to define which market failures apply and what form of regulation is the most efficient to remedy them. We have identified the failure of the market to value the public benefits of renewables as being the most relevant. It is equally relevant, however, to understand that non-market failures can occur whenever the government performs inadequately, including when it fails to intervene or does not sufficiently intervene. Several market and commercialisation barriers also affect market penetration of renewables. These include mainly undeveloped infrastructure and lack of economies of scale. Understanding of the theoretical background will allow us to analyse the energy policy including RES support in the EU and Slovakia.

References


OECD, Regulatory Policies in OECD Countries From Interventionism to Regulatory Governance (OECD, 2002)

OECD, Barriers to entry. 2006.


WORLD BANK: Public and Private Sector Roles in the Supply of Transport Infrastructure and Services, 2004. [cit.].
Enterprise social networks

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Abstract

The topic of traditional social media such as Facebook, Twitter or LinkedIn, is for all common and talked over. We all know them and we use them every day. They include all digital systems that enable people to mutually connect and communicate together. But the issue of enterprise social networks is not so often and in detail communicated. They allow employees of one or more organizations communicate with each other. This provides the opportunity to benefit with similar characteristics which are offered by traditional social media. At the outset of the article, we will describe the principle and specifics of enterprise social networks. Then we will talk about the benefits associated with their use.

Keywords: social media, enterprise social networks, benefits of enterprise social networks

JEL Classification: M15 IT Management

Introduction

Internet is developing by tremendous pace. Any estimates may therefore be misleading. Therefore, for quite some time is used the term Web 2.0, which indicates the direction of development.

The term Web 2.0 describes trends and ways in which the web will probably take. However, someone argue that Web 2.0 is just a bubble - marketing term created how to amaze and gain customers with something that does not exist. The second on the other hand see new quality and others say that Web 2.0 = social media.

Over the last few years, many companies have adopted various types of social media such as blogs and wikis for its internal use. These technologies of social media, often refer to collectively as Enterprise 2.0, enable companies to accelerate organizational performance by encouraging inward directed not only cooperation but also to unite internally and to respond customer support, innovation and sales and marketing opportunities. The presence of the Enterprise 2.0 paves the way for future when cooperation on employee-to-employee and intra-corporate interaction become extensions of ourselves and therefore are a useful way of providing mutual value of the company and individual employees. These social media tools have three basic qualities. First, they are usually easy to learn and use. Second, all social media platforms usually start on an equal basis, the empty tables and external reputation has less impact than internal reputation. Thirdly, and perhaps most remarkable is that it allows individuals to engage in work and at leisure.
At the beginning of the article, we have explained the basic concept, which will be discussed, Web 2.0. From it are subsequently deriving other concepts such as social media, social networking, and enterprise social media. These terms will be explained in the first part of the article, so that we will put you into the research problems. Then we will explain principles of enterprise social networks. We will outline the benefits of their use for the companies themselves.

Social media, social networking, and enterprise social media: basic terminology

Social media allow people to exchange ideas and opinions, discuss together the content of pages and make contacts online. Social media is different from traditional mainstream media in that their content can create everybody as well contribute into it or comment on it. They may have a text format, may be an audio, video or photographs and other visual forms that bring together communities, and assist people who want to associate together.

Enterprise social media are different from traditional communication technologies, which are often used in today's organizations. Because their users can see the ongoing conversations between others in the organization who do not belong to a communication partner and are capable of distinguishing social and work relationships between them.

How these new technologies are beginning to multiply across the organizations, it is important to develop an understanding of how they enable and limit communication activities through which the work is done, because it is this dynamic that creates and maintains the organization.

Enterprise social media are web-based platforms, allowing workers:

- sending messages with specific colleagues or sending messages to everyone in the organization;
- explicitly or implicitly identify a specific co-workers as a communication partners;
- contribute, edit, and organize text and files that are connected between them or other persons; and
- view messages, links, and text files communicated, sent, edited and sorted by anyone in the organization at any time in its sole discretion.

The operating principle of enterprise social networks

At present, the companies even they are small or large, still most widely use e-mail as tool for sharing information and knowledge. In 2015, was he total number of emails sent and received per day over 205 billion. Enterprise social networks would help workers effectively find the information. This will reduce the time needed to research and find solutions to various problems, so that workers will not be overloaded with emails.

Enterprise social media do not function as a channel through which communication goes through, it works like a platform where social interaction occurs. Because this is a digital platform, in contrast to physical platforms of offices, conference rooms and corridors, which are traditional steps in which the job runs most of communication. Anyone in the organization can attend to it at any time and from any location. Due to the dramatic changes in social
interaction, which predicted the rise of enterprise social networks, it's no wonder that analysts and the business press have anticipated an unprecedented transformation in the way of organization in the coming decades.

Enterprise social network allows employees of the organization to connect with one another and discover other people within their organization worldwide.

One of the key features of enterprise social platform, similar to a traditional social media is profile. Each user has a profile where he or she is adding skills, contact information, photos, hobbies and everything else that is relevant. This feature makes easier to find people in your organization using built-in search function. Perhaps it reminds you traditional social media features such as LinkedIn. Internal profiles become more powerful when we consider the other key feature of enterprise social media and that is collaboration.

Enterprise social networks enable collaboration across the globe. Most platforms allows you to create or connect to "groups". These groups are virtual environments that allow users to merge, publish and share content of interest of members of the group, like in groups on professional network LinkedIn. So, if you work as online marketing specialist, you should be a member of a group within your organization that focuses on blogging, social media and marketing. By integration into such a group, you can see and communicate with colleagues in your area worldwide. Due to the fact that every user has their profile with the data, it is easy to contact them so they build their network of contacts.

The main functions of corporate social media are:

- User profiles and their personal information,
- Questions and Answers,
- Creation of documents in the cloud-based solution,
- Subsequent sharing of created documents,
- Knowledge sharing,
- Creating new ideas

The real power of enterprise social networks arises in discussions within the established groups. Let us return to the example of searching for a colleague who would help you with a problem with the database and have a specific skill, speak Arabic. If we put this request to search in the enterprise social network and look into several discussions on this subject, we can easily find a person who could help us. Thus we are working more efficiently.

**The benefits of using enterprise social networks**

Thereby as social media becomes a traditional phenomenon, in companies is increasing interest to take advantage of knowledge of employees with equivalent technology to strengthen communication and cooperation among employees. There are several advantages for companies using enterprise social networks, the most important are:
1. Involving customers and employees - by implementing enterprise social networks into the company and by setting the culture of their use within the company but also to the cooperating companies. There is a better and more effective communication and understanding of the needs for example of customers.

2. Creation of innovation through knowledge sharing - in cooperation across divisions or communication and knowledge sharing within groups with a particular interest in the company is creating the generation of new ideas and subsequently innovative approaches.

3. Better quality of decision making - through knowledge sharing and creation of knowledge database is creating the basis and data for improving of decision making in the company.

From the above benefits results that the use of enterprise social networks positively influence and make more efficient work and processes in the company.

**Conclusion**

At the end of our article we are summarizing the findings to which we have come. Of the above features and benefits of enterprise social networks it shows that the introduction and use of enterprise social networks is advantageous for companies. Since the creation of user profiles with their personal information, features of discussion forums as questions and answers, creating of shared documents in the inter-cloud-based solutions, subsequently sharing of created documents, sharing of knowledge and creating new ideas are tools for generating benefits for companies by their employees. Those advantages are engaging customers and employees into company processes, creating innovation through the sharing of knowledge among employees worldwide, better quality of decision making by creating a knowledge database arising from the discussions and employee profiles.

In general, for companies in today’s time of internet is necessary to use social media, whether traditional or enterprise. Thereby providing communication with their customers or enable employees to communicate with each other in order to be able to generate new ideas and thus create innovation.

**References**


Huang Y., Vir Singh P. and Ghose A., (2011) ‘A Structural Model of Employee Behavioral Dynamics in Enterprise Social Media,’ Carnegie Mellon University Research Showcase @ CMU, Tepper School of Business


The consistency of marketing performance management system in selected company

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Abstract
Measurement and evaluation of company performance is an important activity through which it is possible to assess the company's ability to achieve its objectives in measurable units. The performance of individual business units can be measured and evaluated by financial and non-financial indicators, while current models take into account mainly non-financial indicators. Measurement and evaluation of marketing performance is more difficult because the effects of the implementation of marketing activities are reflected in particular in increasing the satisfaction and loyalty of customers whose quantification is much more complicated. Companies use different systems for measuring marketing performance made up of sets of indicators which help to measure the performance in achieving the strategic and operational objectives of the company. The aim of this paper is to assess the consistency of marketing indicators definition in a selected company. To achieve this goal it is necessary to determine what marketing indicators used by us studied business. Consistency of marketing indicators will subsequently be assessed through the application of innovative tool MESOT framework.

Keywords: Business performance. Marketing indicators. Consistency of marketing indicators. Performance management system. MESOT framework.

JEL Classification: L25

Introduction
Implementation of marketing concept into business structure can lead to the superior performance. Following this idea it is important to measure marketing activities effects in order to assess the profitability of these activities. For measuring performance of various business processes are used performance management systems (PMSs), such as Balances Scorecard. Measurement of marketing effectiveness and efficiency is possible through the different marketing performance measurement systems which are a part of PMSs. Effective PMS should be consistent. MESOT framework represents a tool for analyzing consistency of PMS. The purpose of this paper is to assess the consistency of marketing performance management system in selected manufacturing company using MESOT framework.

Literature review
In order to find out the effectiveness of marketing activities it is important for business to measure effects of these activities. Seggie et al. (2007) state that measuring marketing activities is important also for Marketing Science Institute, which defines the marketing metrics and return on marketing investment (ROMI) as the priority for research in years 2002, 2004 and 2006 (In: Hajdú, 2013). Lamberti and Noci (2010) added that Marketing Science Institute has
ranked marketing accountability, return on marketing investments and marketing performance management systems as a top priority for 2008-2010. However, there are some difficulties with the measurement of marketing activities, because of intangible character of their effects. Considering the character of marketing outcomes it is necessary to apply methods that take into account also non-financial performance indicators for their measurement. In the following subsection we describe performance management systems and several modern methods of measuring performance.

**Performance management systems**

Lesáková (2004) defined the performance as the company's ability to achieve the desired effects or outcomes, and possibly in measurable units. Nenadál (2001) uses the definition of performance formulated by the European Foundation for Quality Management (EFQM) where the performance is understood as a rate of attainment by individuals, groups, organizations and processes (In: Varcholová et al., 2007, p. 9). Company performance can be measured through the key performance indicators that serve to evaluation of actual development of the company in comparison with objectives and targets that it has set (Kabát et al., 2013). Brudan (2010) mentioned several differences between performance management and performance measurement in his study. He describes performance management as an overarching process that deals with performance. According to him performance management includes several sub processes, such as strategy definition (planning/goal setting), strategy execution, training and performance measurement. It follows that performance measurement is a sub process of performance management that focuses on the identification, tracking and communication of performance results by the use of performance indicators. The main difference between performance measurement and performance management is that performance measurement deals with the evaluation of results, while performance management deals with taking action based on the results of the evaluation and ensuring the target results are achieved.

Srimai et al. (2013) summarize views of Otley (1999), Brudan (2010) and Adler (2011) who describe performance management systems as an organization wide, strategic, integrated management tools to facilitate the management of strategy and operate under diverse labels. Construction and implementation of an effective performance management systems is a difficult and complex task that needs to be dynamic and to consider the expectations of all stakeholders (Akbar et al., 2015). Harrison et al. (2012) state that over the past two to three decades have been developed multiple systems or frameworks that are designed to improve accountability by linking strategy and performance to various perceived stakeholder needs (In: Akbar et al., 2015).

There are several current models that include financial and also non-financial performance indicators of the company. The first such model is the PIMS (Profit Impact of Market Strategy) that role is to assess the impact of the chosen strategy on the performance of the company under the current environment and achieve comparison with similar undertakings (Dubovická, Varcholová, 2011). Authors further state that the performance of business activities is mainly influenced by four groups of strategic performance levels, which are a combination of financial and non-financial indicators. These include competitive position (absolute and relative market
share, relative quality and price), the market environment (marketing costs in relation to sales, the degree of concentration of the industry, concentration of customers and volume of purchases), stage of life cycle (market growth, the ratio of research and development costs to sales, the ratio of revenue from sales of new products to total sales) and financial and operational structure of the company (the ratio of investment to sales and added value, operating return on sales, the ratio of \( \frac{P}{E} \) of investments, capacity utilization, the ratio of debt to investment and the ratio of value added to sales).

Next widely adopted concept by companies is Balanced Scorecard developed by Kaplan and Norton. These authors premise that an exclusive reliance on financial measures in a management system is insufficient and supplement financial perspective by customer perspective, internal process perspective and learning and growth perspective. Customer perspective identifies outcomes from delivering a differentiated value proposition, for example market share in targeted customer segments, account share with targeted customer, acquisition and retention of customers in the targeted segments, and customer profitability (Kaplan, Norton, 2001). The internal process perspective includes an assessment of the innovation, production and after-sales process and learning and growth perspective consists of employee satisfaction and their skills, the level of organizational and technological structure, and the remuneration system (Rajnoha, 2013).

A comprehensive model Six Sigma is focused on improvement of processes with the aim to increase the efficiency of enterprises. Its essence is orientation on customer requirements and needs, and this model combines strategic approach, marketing orientation and quality management together with the use of statistical methods. Model Baldridge Quality Award aims on comparison business performance with the best results. In Europe is more familiar model EFQM Excellence Model, which was developed with the aim of increasing the competitiveness of European enterprises. The model contains the criteria to improve performance in relation to the company strategy (Dubovická, Varcholová, 2011, p. 58).

**Measurement of marketing performance**

Several authors (Amber et al., 2004; Walker and Ruekert, 1987) characterize marketing performance assessment systems as collections of performance metrics that reflect marketing effectiveness and efficiency (In: Frösen et al., 2013). Marketing performance management has been one of the most prominent streams in recent marketing research and practice. Clark and Ambler (2001, p. 231) simply define marketing performance measurement as the assessment of “the relationship between marketing activities and business performance” (In: O’Sullivan et al., 2009, p. 844).

Grønholdt and Martensen (2006) argue that marketing performance can be measured by several outcomes including financial outcomes, marketing outcomes and the outcome of customer feelings and customer behavior (In: Chang et al., 2012, p. 86). In measuring marketing performance in addition to conventional accounting factors such as the sales growth rate, market share and profitability, also the satisfaction of stakeholders should be considered (Lumpkin and Dess, 1996). Mone et al. (2013) states that marketing performance management includes also marketing planning, execution and use of marketing results for performance improvement.
Marketing performance management includes monitoring and assessment of marketing results which are main processes of marketing performance measurement.

Marketing performance indicators are frequently associated with marketing controlling. Opletal (2002) define marketing controlling as the tool of marketing activities management whose main meaning consists in planning and assessing successful impact of marketing activities on business profits. It is a measurement of economic effectiveness of marketing activities. This measurement is provided by marketing controlling indicators. According to Ďaďo (2001) marketing controlling indicators can be divided into following groups:
- indicators of market (market share, relative market share, saturation of market, etc.),
- indicators of sales (sales, sales margin, net profit from sales, etc.),
- indicators of competition (market share, customer structure, sales volume, etc.),
- indicators of customers (revenues according to customer segments, number of orders per customer, ratio of supplies and orders, etc.),
- indicators of marketing mix (product – profitability of product; price – low limit of price, price elasticity, structure of payments; place – structure of distribution channels, profitability of distribution channel; promotion – advertising costs, revenues from advertising, retention on sales promotion).

Attributes of performance indicators

Závadská et al. (2015) state that for measuring and evaluating performance of business processes is important to identify the indicator attributes. These indicator attributes do not replace the methods of measurements, such as Balanced Scorecard or Activity Based Costing, but they are their internal structure. Závadský and Hiadlovský (2014) in their study classify the attributes of performance indicators into four groups. The first group consists of formal attributes of the PI, the second group consists of attributes of the PI’s target value, the third group includes informational attributes of the PI and the fourth group includes attributes of the PI’s evaluation. Specifications of each attribute are described in following table 1.

Table 1: Attributes of performance indicators

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<th>SPECIFICATION</th>
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<td><strong>F: Formal attributes of the PI’s</strong></td>
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<td>F1: Name of the PI</td>
<td>a specific name of indicator which implies an area of the performance that is measured by this indicator</td>
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<td>F2: Relation to the business process</td>
<td>name and identification number of the process which is indicator related to</td>
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<td>F3: Relation to the strategic goal</td>
<td>relation to operational or strategic level in a PMS</td>
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<td>F4: Strategic goal</td>
<td>name of the strategic goal that is measured by the given PI</td>
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<td>F5: Responsibility for the PI definition</td>
<td>identification of responsible employee on strategic or operational level</td>
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<td><strong>T: Attributes of the PI’s target value</strong></td>
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<td>T1: Responsibility for indicator specification addressed to a specific employee</td>
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<td>the target value definition</td>
<td>( T_2 ): Unit of the PI</td>
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<td>T3: The period defined for the target value achievement</td>
<td>the period on which the goal is set</td>
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<td>T4: The determinants of the target value definition</td>
<td>target value that should be based on real expectations and the existence of the assumption of its determination</td>
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<td>T5: Target value (number)</td>
<td>one of the indicator attributes is a goal and without target value the existence and monitoring of performance would hardly be realized</td>
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### I: Informational attributes of the PI

| I1: Responsibility for data recording | a determination of the employee who records the data necessary for measurement and evaluation of the performance |
| I2: Frequency of data recording | identification of employee responsibilities and frequencies of data recording, if the collecting of data is automated, this attribute is defined by software |
| I3: Place for data recording | name and destination of data store |
| I4: Source of data | determination of input data from which the final values are achieved |
| I5: Calculation formula | definition of the mechanism of final values calculation |
| I6: Automation of the calculation (manually/software) | identification of which parts are necessary to be automated and which parts need to be calculated manually |

### E: Attributes of PI’s evaluation

| E1: Responsibility for the PI’s evaluation | identification of responsible employee for the evaluation of PI’s |
| E2: Frequency of PI’s evaluation | identification of employee responsibility and frequency of data evaluation; if PMS is automated, it can automatically warn a responsible employee to evaluation need, or system is reporting a deviation |
| E3: Visualization of the achieved performance | selection of the method or the way of visualization of the results to the evaluator |
| E4: Action in case of the performance gap | definition of procedure in the case that the performance is in either the “exceed” or “failure” interval |
| E5: Warning signal for evaluator | the warning signal represents an alert to the person who is evaluating the achieved level of performance |

Source: Processing according to Závadský, Hiadlovský, 2014
Research design and methodology

The purpose of this paper is to assess the consistency of marketing performance management system in selected manufacturing company. Research was realized in manufacturing company located in the middle of Slovakia which is a branch of multi-national manufacturer of building materials and construction systems. In order to assess the consistency of marketing indicators definition we have decided to use the MESOT framework (Measuring and Evaluating Strategic and Operational Targets).

MESOT framework is used for evaluation of consistency of performance management system and it is applicable in the specific business conditions. In our research we apply the methodology of MESOT framework construction from Závadská et al. (2015). In their study MESOT framework is constructed into the table, where rows provide information about 21 attributes of performance indicators and columns describe specific performance indicators. In order to evaluate total consistency of PMS all indicators used in company should be involved, in our case all 16 marketing performance indicators.

Authors also state that it is possible to assess whether PMS is partially consistent according to sum of values in the corresponding lines. Framework consists of values 1 or 0 depending on the fact whether indicator in corresponding column has defined attribute or has not. If the attribute is defined, the value 1 is written and if the attribute is not defined, value 0 is written. The last column is summarizing column in which we sum values in corresponding lines. The sum can reach values from 0 to value equal to the number of indicators. If the value in last column is 0 there is a negative partial consistent definition. If the value in last column is equal to the number of indicators there is positive partial consistent definition of all the indicators. All values between these border values speak of inconsistent definition of indicators attributes. Last row is summarizing for individual columns where the interval of values is 0 to 21. Total consistency of PMS represents situation when all the attributed in all of the rows have values equal to the number of analyzed parameters (Závadská et al, 2015).

Results and discussion

In our research we assess the consistency of marketing performance management system of selected company by application of MESOT framework. Companies can assess effectiveness of marketing activities through the various indicators. Researched company measures its marketing performance by 16 marketing indicators:

1. Market Share - MS
2. Sales in EUR/Amount of Sales in Tonnes – S
3. Increasing of Sales - IS
4. Contribution Margin – CM
5. Net Sale Price EUR/Tonne - NSP
6. Profitability on Customer - PC
7. Number of Orders per Customer - NOC
8. Profitability of Product - PP
9. Profitability of Segment - PS
10. Number of Discounts - ND  
11. Structure of Distribution Channels - SDC  
12. Advertising Costs - AC  
13. Revenues Caused by Advertising - RCA  
14. Sales Promotion Costs - SPC  
15. Sales Promotion Retention - SPR  
16. Return on Marketing Investment - ROMI

In our research we analyzed the consistency of marketing performance management system including these 16 marketing performance indicators. We used the MESOT framework structure and fulfill the table 2 with the data reached from researched company. In the first column are written attributes of performance indicators, in the first row are numbers of marketing indicators and in the second row are abbreviations of the name of marketing indicators. Value 1 is written when company has defined specific attribute for individual marketing indicator, value 0 means that it has not.

Table 2: Application of MESOT framework in selected company

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Source: Processing according to Závadská et al. (2015)
Závadský and Hiadlovský (2014) in their empirical study stipulate the minimum set of indicators attributes for the consistent performance management system. Company should define attributes F1, F2, F3, T2, T3, T5, I4, I5, E3, E4, E5 of their performance indicators. According to these findings we can conclude that marketing performance management system of researched company is not consistent. Researched company does not define attributes F2, F3, F4, T5, E3, E4, E5 for several marketing performance indicators. Inconsistencies are shown in the table 2 in last column by red color. All 21 attributes are defined only for indicator CM (Contribution Margin). Závadská et al. (2015) speak about partial positive consistency and partial negative consistency. Partial positive consistency is shown in last column by green color. The negative partial consistency would be possible in the case that chosen attribute would not be define any indicator. In table 2 we can see that researched company has positive partial consistency of attributes F1, F5, T1, T2, T3, T4, I1, I2, I3, I4, I5, I6, E1, E2. We can conclude that there is not total consistency of marketing performance management system of selected company.

**Conclusion**

The aim of this paper was to assess the consistency of marketing indicators definition in a selected company. In order to achieve this aim it was necessary to operationalize basic terms such as performance management system, performance measurement system, marketing performance management system and marketing performance indicators. We identified marketing indicators that are used in selected company and examined the definition of its attributes, including 21 attributes divided into four group which are formal attributes of PI, attributes of PI’s target value, informational attributes of PI and attributes of PI’s evaluation. Consistency of marketing indicators was assessed through the application of MESOT framework, which is a tool for evaluation of performance management system consistency.

We have applied MESOT framework on specific marketing performance management system of selected company. We can conclude that marketing performance management system of researched company is not consistent. This inconsistency was caused by shortcomings in defining of specific attributes, namely relation to the business process, relation to the strategic goal, strategic goal, target value (expressed by number), visualization of the achieved performance, action in case of the performance gap and warning signal for evaluator. These inconsistencies are shown in the table 2 in last column by red color.

We consider that missing of several attributes’ definitions can cause significant problems for researched company. Firstly, there is missing definition of relation to the strategic goal and relation to the business process, what can lead to apparent meaninglessness of measuring of marketing performance indicators. All indicators should have defined these strategical attributes. Also, researched company has not defined target values expressed by concrete number for three of its marketing indicators, namely structure of distribution channels, revenues caused by advertising and sales promotion retention. In our opinion, it is possible to define target values in numbers for these indicators, because of its character. Measuring of marketing performance through these indicators without identifying of target value seems to be impossible, because marketing managers have no chance to compare achieved values with
target values and thus, it is not possible to measure marketing performance through these indicators.

Researched company also has not defined attributes visualization of the achieved performance, action in case of the performance gap and warning signal for evaluator, which are also part of the minimum set of indicators attributes for the consistent performance management system suggested by Závadský and Hiadlovský (2014). The least points achieved last attribute – warning signal for evaluator, what means that for more than a half of indicators is not defined an alert to the person who is evaluating the achieved level of performance. We consider definition of this attribute as necessary for responsible person in order to quick and adequate reaction in the case of negative tendency of indicator.

The next finding is that all 21 attributes are defined only for indicator contribution margin. However, the researched company achieved partial positive consistency in definition of 14 attributes from overall 21 attributes. Finally, we can conclude that there is not total consistency of marketing performance management system of researched company.

Our research has several limits, which can be eliminate in future research. Firstly, the source of data was an employee of researched company. Therefore, the data about marketing performance measurement system could be subjective. Secondly, we assessed consistency of marketing performance measurement system which contains 16 different indicators. However, there is a possibility that company measure marketing performance also through the other indicators. So, in case of choosing the other indicators, results could be different. Thirdly, the results could differ when we would use another tool for assessment of consistency of performance measurement system. In future research there is a space to assess consistency of marketing performance measurement system using different techniques or methods and compare these results with that achieved by application of MESOT framework.

The main value of this paper lies in assessment of consistency of marketing performance indicators attributes definition in selected company. We practically applied MESOT framework in real business conditions. The results of our analysis might be useful for researched company in order to apply some steps to make marketing performance indicators attributed definition consistent.

References


Lesáková, Ľ. 2004. Metódy hodnotenia výkonnosti malých a stredných podnikov, Univerzita Mateja Bela, Ekonomická fakulta, Banská Bystrica


Varcholová. T. et al. 2007. Meranie výkonnosti podnikov, Ekonóm, Bratislava


Knowledge management and information systems

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Abstract

Knowledge management is nowadays defined as a strategy, which helps the company to increase its competitive advantage thanks to effective usage of knowledge. Knowledge management consists of several activities that are supposed to not only implement the strategy into real life situations but also help with its recognition, analysis, implementation and usage. This strategy affects various aspects of businesses including information technologies as well as human resources. Although there are several methods of implementation knowledge management into real life situations, it is still difficult to find only one particular system that would work with implementation into all the aspects. One of the main reasons of this can be a fact that there is a protection of intellectual property and the implementation methods are considered as a trade secret. Information systems play important role in knowledge management since their correct implementation results in effective company operation as well as its higher productivity. Appropriate usage of information systems is considered as an equal connection and mixture between information systems and knowledge of humans in terms of evaluations, opinions, observations and knowledge that cannot be translated in a computer language. Implementation of knowledge management not only helps the company to build the competitive advantage but also gives opportunities to show the imagination and creativity of the company’s management. Investments into knowledge management increase the market value of the company which can be visible in the future.

Keywords: Knowledge Management, Information systems, Knowledge, Competitive Advantage

JEL Classification: M15

Introduction

Time and information are nowadays considered as the most valuated and expensive articles on the market. Thanks to fast development of information technologies, humans acquire way more information than they used to in the past without even realizing it. Because of enormous numbers of information perceived, it is impossible to know everything. If there is a situation which is completely unknown and new to a man, they should not focus on self-criticism but instead, they should focus on gathering information from the others to find a possible solution.

Knowledge management focuses on this type of situations when people are trying to examine the procedures they should take to get into the next level. But how do we find out who we should trust? How can we be sure the specialist we hired is really a specialist in the particular field? The truth is there is no way we can figure it out and thus the only option we have is to trust the specialist and learn more by asking questions which can reveal whether the respondent can clearly answer the question or if there is some knowledge from previous work experience. In other words, we learn and gather new information all the time and later on, we use this
gathered knowledge to make a final decision. “The main principle of knowledge management is to learn not only before making decision, but also during and after this process” (Collinson, Ch. & Parcel, G., 2005).

What we need to realize is a fact that the knowledge management can be found not only in a business sphere but also in a personal life. Every activity we are about to perform must be evaluated and the questions or possible concerns must be answered or discussed with other people with some experience. At some point, it is also recommended to summarize all the previous steps that were taken and consider future steps. All these actions play important role in the knowledge management since they save not only resources but mainly time.

Knowledge management experts do pursue the following sequence which is data- information- knowledge. It is important to gather particular data which are information retrieved from the literature and later on transferred into knowledge. There is a thin line between information and knowledge; information can be characterized by questions including “who” “where” “when” “what” and knowledge can be defined by questions such as “how” or “why”. “Knowledge is a complex of information put into various contexts and also it is a folder of experience, abilities, values and competences, which allows fulfilling of particular tasks or actions” (Katuščáková, 2009).

Levels of Knowledge Management

According to the experts, there are several perspectives when talking about distinguishing the levels of knowledge management; one of the most commonly used is a division by the organizational levels which are international level, national level, organizational level and knowledge management level.

International Level

International level is considered as a starting point for all the other levels of knowledge management. Very often this level is characterized as the knowledge economy or knowledge society. There are not specified boundaries for it can intervene into other aspects including companies, unions and states. This level is depended on time and location only in minimum and knowledge cannot be located in one particular location. Thanks to information technologies, this aspect can work in a virtual reality so that it is more flexible but also at the same time more difficult to coordinate in terms of management.

Economy sectors which used to work separately in the past are nowadays more interconnected thanks to knowledge management. Consequently, there are new organizations, industries and also new technologies that enable production of new goods and services so that the customers get customized products based on their needs and requirements. Pricing is more flexible in comparison with traditional economies and high quality standards are at this point more important.

All the transactions are done in a real time environment and sequence of steps taken is immediate without any waiting time. Customers communicate not only on a regional level, but many of them communicate in a global way; thanks to online world, customers communicate with each other all the time to share their experience or opinions. Knowledge management is reality that creates new requirement for all the managers on all the managerial levels in any department of the company.

Are the countries ready for these changes? World Bank measures the knowledge economy on regular bases and uses 76 indicators that are focused on four basic areas of knowledge economy.
which are economic incentives and legislation, knowledge and human capital, innovations and information infrastructure. Also, World Bank considers other macroeconomic factors as well as development index of human capital. Speaking about Slovakia, the most crucial aspects of the knowledge economy are new international companies that entered Slovak market, innovation base and also information and communication technologies which are now available in many regions. On the other hand, there is a lack of financial support of research and development, science and universities and thus we are losing young and qualified graduates and researchers. Based on World Bank recommendations, it is important to learn from the successful businesses, use knowledge of experienced and not to just copy the ideas of the others. Application of knowledge economy is a long process that can last several years (Horníková, Z., 2004).

National Level

National level of knowledge economy and knowledge society can be found in majority of governmental documents of a particular country. The main purpose of this economy is to process and later transfer information into knowledge. Back in 2001, the government of Slovakia approved State policy of society informatisation, in January 2004 there was approved Strategy of society informatisation in Slovak Republic and November 2004 the new project MINERVA was introduced which focuses on Lisbon strategy in Slovakia. “To make Slovak economy successful, it is important to focus on highly skilled and qualified labor force and avoid cheap unqualified labor” (Vláda SR, 2010). Additionally, back in 2007 there was introduced National Reference Framework program which lasted five years with main focus on innovations, research and development, implementation of information technologies and modernization of health services.

Slovakia is a country with small but open economy. While in 2005, economic openness index of Slovakia was 77 per cent, in 2014 this index increased by 6 percent to 83 per cent thanks to which the economy of country is ranked as one of the most open in the world. Also the number of investments and inflow from the other countries has a positive trend on annual bases (INFONEWS, 2015).

Organizational Level

This level is also known as knowledge management when more detailed concepts are proposed. Knowledge is one of the most important strategic resources the companies have which enable the firm creating a competitive advantage and positive volume of outputs. Top management of the corporation is trying to use their knowledge as well as knowledge of associates when managing the company and is creating a positive attitude towards gaining new experience and knowledge. The basic principles are used through the entire economy including companies, organizations and government. At this level, managers are paying high attention to the knowledge although the systematic work at this level is still pretty rare.

Knowledge Management Level

In this particular level, we use methods, principles, techniques and procedures that are connected with less exact sciences such as psychology or sociology. Outputs are used to achieve goals and visions of the company, departments, teams and associates. In other words, here we use appropriate knowledge for a particular task or job in which we use techniques and means that were adapted and adjusted for a specific task.
Intellectual Capital

Intellectual capital can be defined and understood from different perspectives; the main structure of the intellectual capital is:

- human capital can be found in knowledge, experience, creativity, competences, skills, talents and expertise of all the employees of the company
- customer capital focuses on relations with consumers as well as databases of customers, while in some cases it is considered as a part of human capital
- process capital involves processes that take place within the company and also infrastructure needed for employees who work from home
- intellectual capital deals with know-how, registered trademarks, trade secrets, patents and other forms of intellectual property that shall be protected
- intangible assets are usually culture and environment of the firm and values that all of the employees should follow

Conceptual View of Knowledge Management

This view focuses mainly on problem solving tasks connected with definitions of knowledge and knowledge management, recognizes knowledge principles and deals with theoretical perspective of exploring knowledge management.

Process View of Knowledge Management

Process view deals with definitions and understanding of processes that are taking place within the management of knowledge. These processes are usually formalization, distribution, sharing, application and recovery of knowledge of company. This view also includes retrieving, gathering, exploring, extending and application of knowledge. Depending on a model, some of them are more complex and include in more details processes that can be found in the company. These are usually more complex and difficult and focus on development of new knowledge, their stabilization and distribution and also combination with already existing ones.

Technological View of Knowledge Management

Technological view of knowledge management shows the way the information, communication and knowledge technologies can help with realization of knowledge management. Modern technologies are closely connected with fast and rapid development of the organizations and thus these cannot be underestimated. Organizations do focus on connections of people and knowledge, connections of different knowledge, connections of people, transformation of specific knowledge into general ones, transformation of information into knowledge and transformation of data into information and later into knowledge. As it can be seen, there can be found many combinations such as intranet, push technologies, help-desk applications, brainstorming applications, groupware, workflow systems, information retrieval and also data clouds, data storing and data search.

Organizational View of Knowledge Management

The main priority of organizational view of knowledge management is to solve the problem of characteristics of knowledge organization, its main goals, responsibility, organizational learning and formal and informal organizational structure.

The main purpose of the expertise center is to identify and apply some standards and methods in a particular domain, establish partnership relations, evaluate competences and productivity of the employees and identify and remove weak parts in the employees’ knowledge.
Additionally, expertise center are supposed to create, examine, improve and maintain the storage of knowledge from the particular field and also to provide trainings and consultations.

There are four types of projects of knowledge management which are transfers of knowledge, knowledge storage, evaluation management of knowledge and development of infrastructure.

Common interest communities do consist of people coming from different fields in order to collaborate on various projects or to solve specific problems and usually last the same amount of time as the time needed to accomplish the project or solve the problem.

Common interest experience consists of people who share same or very similar experience from the same field; this type of community in comparison with the previous one is not temporary. Additionally, these people help and support new employees who are looking for advices and need some help when working on a project.

Lastly, there is always the main knowledge employee, who always enforces the principles based on knowledge and learning, creates knowledge strategy, updates it on regular bases and provides important suggestions to create new knowledge and their implementation in already existing processes (Kelemen, J., 2008).

Implementation View of Knowledge Management

Implementation view brings new possibilities, methods, processes and procedures that significantly help with implementation of knowledge management into practice. The main factors that are examined in this view are critical factors of success, expected problems, implementation of information and communication technologies, expected advantages, strategies of knowledge management and various methods of knowledge management implementation such as evaluation of infrastructure, analysis, proposals, development, implementation and evaluation. All of these phases have its own sub phases which must be analyzed in each project (Bures, 2007).

Managerial View of Knowledge Management

The last view of knowledge management the managerial one deals with procedures connected with managerial processes, evaluation and rewarding of employees, financial and nonfinancial benefits, evaluation of human capital and creation of corporate culture. The benefits are based on all the basic goals and visions of the company have relations to the company’s own knowledge management. Speaking about business goals of the company, these can be in forms of higher profits, lower expenses, implementation of new forms of working processes, definition of new opportunities on the market, boost of sales and increase in the productivity. Speaking about own knowledge management, these can be expansion and spread of the best practices into the company, improvement of relations with the external environment and also elimination of loosing of know-how (Truneček, J., 2004).

Practical part

In order to successfully and effectively manage the company, it is crucial to identify the knowledge the company and its employees can offer. To be effective, managers need to know where exactly they can search and retrieve knowledge so it can be used not only for the benefits of the company but also as the basics for the knowledge culture of the organization. Knowledge within the organization can be expressed in the following processes:
– socialization (spending time during formal and informal meetings, outside the workplace, sharing some vision and building trust)
– externalization (quality control, improvements of production and processes, concepts of new product implementation)
– combination (gathering information within the organization followed by their combination)
– internalization (various trainings, manuals and instructions about work and organization, learning while working)

In order to get background information and data for this project, we created a small research to figure out ways the companies identify the knowledge and the ways of their implementation. For the project, we decided to use the quantitative research method of data gaining where we created questionnaires that were distributed into three organizations located in Trencin district. The questionnaire consisted of six closed questions out of which two helped us with identification of the respondents and the rest of the questions were focused on the topic of the research. The questionnaires were anonymous. At the beginning of each questionnaire there was an introduction where we kindly asked the responders to fill in the survey and explained its purpose. There, we also informed the respondents that the outcomes and results of the questionnaires will be published only for the purpose of the conference. We asked 126 respondents to fill in the questionnaires out of which 113 filled them in so the response rate was 89 %. The duration of the research project was one month and started on March 1st, 2016 and ended on March 31st, 2016.

**Question 1: How old are you?**

Majority of the respondents are under the age of 30 (35 %) followed by respondents between 41 and 50 (23 %), respondents between 31 and 40 (21 %), respondents between 51 and 60 (17 %) and finally respondents over 61 (4 %).

![Picture 1: Age of respondents](image)

Source: Own research

**Question 2: What is your gender?**

71 % of the respondents were women followed by 29 % of men.
Question 3: How would you characterize usage and sharing your knowledge towards improvements of the knowledge culture of your organization?

This question revealed that 58 per cent of all the respondents find their knowledge to be their competitive advantage and thus they do not share it. 23 per cent of the respondents communicate and try to share their knowledge for the benefits of a team. 19 per cent of the respondents are trying to hide their knowledge.

Question 4: What conditions are created by the organization to support knowledge culture?

72 per cent of respondents claimed the system was working only partially. 17 per cent said the company did not create any sufficient conditions to support and build this system. Only 11 per cent believe that there is a system that supports searching, identification and integration.
**Question 5: What are the options to gain knowledge in your organization?**

This question was used to find out the options the organization is using to gain some new information or knowledge for their employees. 66 per cent of all respondents said they got new information from their coworkers. 22 % respondents believe they receive new information because it is a requirement of their management. 9 % of respondents get knowledge voluntarily thanks to good relations on the workplace. 3 per cent of the respondents are not sure about sources and options of getting knowledge in their organization.

![Options of gaining knowledge](image)

**Picture 5: Options of gaining knowledge**

**Question 6: What activities are used in your organization to gain new information?**

The main purpose of the last question was to figure out the activities the organizations are usually using to support learning of their employees. 29 per cent of the respondents are supporters of continuous and additional learning. Out of all responses, 27 per cent usually consult some problems or questions with their colleagues. 25 per cent usually participate on some short lectures or training sessions and workshops. 13 percent of respondents usually retrieve necessary information from the internet and 6 per cent is getting knowledge in their free time on their own expenses.

![Learning activities](image)

**Picture 6: Learning and knowledge gaining activities**

Source: own research

**Suggestions and recommendations**

Based on the research, we are going to analyze and conclude the following research questions

– if the age of respondents affects their knowledge sharing
— if the gender affects ways of gaining and retrieving knowledge and information
— if the age affects activities of information gaining

The main purpose of the first question is to figure out if the age of respondents affects the way they share their knowledge. Based on the questionnaires, we can see the respondents under the age of 30 find their knowledge as the competitive advantage and thus they do not share it. This can result from the situation on the market when people under the age of 30 are afraid of losing their competitive advantage and consequently losing their job. On the other hand, older respondents in the other age categories are not sensitive in their knowledge sharing have are willing to share their knowledge for the benefits of a team or with their younger coworkers. Based on these results, we can conclude that age affects the information sharing among the employees.

The second question was dealing with correlation between the gender of the responders and ways of gaining knowledge. There were 71 per cent women and 29 per cent men who participated in the survey. Their responses were almost equal and both groups said they gained their knowledge thanks to the work and friend relations and because of the requirements of their management. That is why, it can be said that the gender does not affect the ways of gaining knowledge in the organizations.

In the final question, we were trying to figure out the ways the age affects information gaining activities. Majority of the younger responders claimed that they preferred additional university and continuous learning and learning on their own expenses. On the contrary, older respondents found training sessions, seminars and workshops more popular and appropriate form of information gaining activities. Therefore, we can say the age significantly affects the information and knowledge gaining activities.

References


Diversity between business model as visualization and real business model

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Abstract
The business model talks about how specific business operates. It shows logic and systems of company. Currently, there are various opinions on what the business model is and what its role is. The topic has been actively addressed in academia, but has found its application in practice as well. One of the most popular models is the business model Canvas, by authors Osterwalder and Pigneur that captures the basic lines of business clearly on one page through nine boxes. Similarly, other authors created figures of a business models, that capture the logic of business in order to better understanding the functioning of the company. However, in theory and practice, appears also another way of understanding the business model. These business models talk about how the company is actually report on the market, what are the steps and how company generates revenue. These models can be called the real business models. This group might include, for example, the free business model or advertising model. About these models, for example, says author M.Rappa. The aim of this paper is clearly differentiate the business models as visualization and the real business models.

Keywords: business, model, visualization, market

JEL Classification: M10, L22, L26

Introduction
Business model is a very complex topic. Business models as topic took their place in business as well as in academic sphere. Business model is great way how to visualize business and consider all of the important parts of it. Business models are very helpful tool for startups and young companies. Business model is better for verification of livability of idea and great tool to build a business from idea. Business model slowly take over business plans, mostly in early stages of businesses. Of course business plan, will always have place and be important, because in them founder of business must deeply consider financials, and that is very important. But business model gives founders complex look on their business. One of the most used business model is model Canvas from authors Osterwalder and Pigneur. This model has brought topic of business model on sunlight among business men and academia. Model Canvas is one of the most used models, because of its complexity and simplicity. Model Canvas is visualization of real business, because it reflects the most important parts of business in one page, divided into nine blocks. Some other models does not have visualization, the do not say nothing about most important parts of business. They talk about hot business can earn Money. In both this cases we still talk about business model. Usually it comes to confusion. We cannot say which of these models are business models, because they both are talking about important parts of business life. We can separate them into business models and visualization and real business model. This
article talks about these models and shows differences between them. The main questions of the article is: „What is difference between business model as visualization and real business model? What is the role of business model as visualization and real business model?“

We can think of business model in several perspectives (Business Model Innovation: the role of Different Types of Visualization, 2015):

- Business model as reflection of business system, the way they work and basic business logic – visualization
- Business model as description of specific type or as components with common characteristics (e.g. freemium business model)
- Business model as real business and its functions as pattern (e.g. business model of Dell)

In literature we can find mostly two views on business model. Third is mostly used as inspiration or as example of good practice. In literature is still confusion between business model as visualization and real business model.

**Business model as visualization**

Visualization, noun: „The representation of an object, situation, or set of information as a chart or other image“ (Oxford Dictionaries) Business model as visualization is reflection of real business. It means that we can see how business works and its main parts on one paper. In this chapter are presented some of the business models as visualizations.

**Business model Canvas**

Business model Canvas is visual modeling method that is used to capture the business model of company. Business model Canvas shows and highlights the key elements of business in time. Business model Canvas is popular because it can be used not only to model the current state of companies’ business models, but also any future business model innovation. When a company undergoes changes, these need to be reflected in its business model. Planning for new strategies also generates new business models of possible future states. (Vizualizing Business Model Evolution with the Business Model Canvas: Concept and Tool, 2014)

Authors of business model Canvas Osterwalder and Pigneur wrote: “A business model describes a rationale of how an organization creates, deliver and captures value.” (Osterwalder at al. 2009)

![Business model Canvas](pic.png)

Pic 1. Business model Canvas (Strategyzer)
Osterwalder and Pigneur (Osterwalder, at al, 2009) wrote that business model reflects basic principles how business makes money with help from nine blocks. These nine blocks contain four main areas of business – customers, value proposition, infrastructure and financials. We can consider business model as detailed strategy plan, which should be filled through organizational structures, processes and systems.

Author Steve Blank (Blank, at al, 2012), known as startup guru and for his startup thoughts, also works with business model Canvas. He wrote that business plan does not survive first contact with market and customers. Startup should definitely use business model, because model flexible and more suitable for businesses, especially for startups. Business plan is too static for need of modern business market. Blank uses business model Canvas as score card for tracking progress of finding the business model. Business model should be reconsidered every week and changes should be highlighted. Every change should be worked into business model.

Business model by Demil and Lacocq

Demil and Lecocq defined business model based on E.T. Penrose’s knowledge. She wrote that growth of business is the result of interaction between the resources, organization and capacity to assume offer new values to the markets. (Slávik, 2011)

Demil and Lecocq in their article Business Model Evolution (Demil, at al, 2010) wrote: „The business model concept generally refers to the articulation between different areas of a firm’s activity designed to produce a proposition of value to customers. Two different uses of the term can be noted. The first is the static approach - as a blueprint for the coherence between core business model components. The second refers to a more transformational approach, using the concept as a tool to address change and innovation in the organization, or in the model itself. We build on the RCOV framework - itself inspired by a Penrosian view of the firm e to try to reconcile these two approaches to consider business model evolution, looking particularly at the dynamic created by interactions between its business model’s components.‖ Second approach, which is referring about dynamic in business model and its evolving in time. Author wrote that business model may evolve based on internal and external factors. These factors disrupted its established work and processes in organization. External changes are for example arrival of new aggressive new competitor, or high increasing cost of some resources. Internal factors of business model evolution may be manager’s decisions about processes. All of these changes should be reflected into business model, which lead to its evolution.

Demil and Lecocq assumed based on Penrosian view, that business model can be described with three core components: its resources and components, its organizational structure and its

![Pic 2. RCOV framework (Demil, at al, 2010)]
proposition for value delivery. These three components made up RCOV framework (RC resources, competences, O organization, V value proposition). Dynamics of business model circulate v this framework among components, which are affecting each other.

**Real business model**

Some authors designed business models as visualization, but some identified several models which reflect business’s moves on the market. In this case authors identified moves and processes used by businesses in practice. In this part of the article are presented only some of the researched real business models.

**Business models by Rappa**

M. Rappa (Rappa, 2010) wrote, that “in the most basic sense, a business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.” In his opinion some models are simple. It is when organization produce good or service and sell it to customers. In this case it is clear that revenues come from sales. With the beginning of the internet, new types of business appeared in the market. In some cases, their revenue streams are not clear to outsiders. For example what is business of broadcasting companies or some internet portals, which are free for users? Business model of new organizations, the way how they make money, need to be designed and described.

Rappa wrote that business models have been defined and categorized in many different ways. In his work he presented comprehensive and cogent taxonomy of business models observed on the web. Rappa said that this taxonomy is not definite, because internet businesses evolve, so we can expect new model and their combination in the future. These models can be used in many ways and can be combined in one organization, in order to higher revenues.

Types of real business models from M.Rappa (Rappa, 2010):

- **Brokerage** - Brokers are market-makers, they bring buyers and sellers together and facilitate transactions. Usually a broker charges a fee or commission for each transaction it enables.
- **Advertising** – In this case Rappa did not consider traditional media broadcast model, but he consider broadcaster as web site. Provider of web site provides content and services for free mixed with advertising messages.
- **Infomediary** – This model is based on the value of information and data about customers and their consumption.
- **Merchant** - Wholesalers and retailers of goods and services. Sales may be made based on list prices or through auction.
- **Manufacturer (Direct)** – Substation of this model is to compress distribution channel and put closer manufacturer and customer.
- **Affiliate** - It is a pay-for-performance model, if an affiliate does not generate sales, it represents no cost to the merchant. The affiliate model is inherently well-suited to the web, which explains its popularity.
- **Community** – Model is based on user loyalty. Users have a high investment in both time and emotion. Revenue can be based on the sale of ancillary products and services or voluntary contributions.
- **Subscription** - Users are charged a periodic -- daily, monthly or annual -- fee to subscribe to a service.
- Utility - Or ‘on-demand’ model is based on metering usage, or a ‘pay as you go’ approach. Unlike subscriber services, metered services are based on actual usage rates.

Other authors understand business models as reflection of best practice. Model describes how business produces and delivers goods and services, specific business processes, infrastructure and developing customers.

*Business model by Gassman*

Gassman in working paper St.Gallen Business Model Navigator (Gassman, at al, 2013) composed this definition of business model: „In general, the business model can be defined as a unit of analysis to describe how the business of a firm works. More specifically, the business model is often depicted as an overarching concept that takes notice of the different components a business is constituted of and puts them together as a whole. In other words, business models describe how the magic of a business works based on its individual bits and pieces.“

Gassman in his work have analyzed the most revolutionary business model innovations over the past 50 years to determinate pattern in their code. They discovered that over 90% of all business model innovations are new combination existing ideas and concepts form other industries.

Gassmann defined business model as holistic picture of how a company creates and captures value by defining the Who, the What, the How and the Why of business. Innovating a business model means changing at least two of those dimension.

![Business model by Gassmann](image)

Conclusion

Business model became more popular with the internet boom and rising of new businesses. From this time a lot of new business model have been designed. And then several taxonomies and categorizations of these models were created and published. In this time, when internet business are very popular and several new business model are created every year. Need for new categorizing have rise up. In literature and in practice is confusion between what business model should contain, what should give to his users. Some models have graphic form, they look like schema. Therefore are very usable for new but also classic organizations. These business models mostly talk about interact characteristics of organization. On the other hand, some business model does not have graphic form, they are more simple on the first site. They usually say how business works with customers. Real business model concretizes revenues streams of organization.

Business model as visualization is very good way how to present business and relations and affections among main parts of business. The best visualizations are schemes on one page for simple view on the basics of business. The most used business model is business model Canvas.

It is needed to say, that two presented types of business models are not separate parties. On the contrary they are intertwined and they can not exist one without the other. Real business model represents working business in the market, among customers and competitors. And the business model as visualization represents internal functioning of the business model. Simply, we can say that real business models refer about external manifestations of the business and business model as visualization mostly reflects internal factors in organization.

It is common, that some authors designed graphic form of the model and also real model. Authors of Business model Canvas Osterwalder and Pigneur in their book Business model Generations introduced some real business models as well as graphic form of model Canvas, presented in this article. They called these real business models as patterns. They reflected these patterns into Canvas visualization. Gassman also gave in his book Business Model Navigator visualization of the business model and also wide set of 55 real business models.

Described examples of real business model from authors Rappa and Gassman are very similar. They are based on the business practice and similar characteristics among organizations. Gassman’s taxonomy is very wide and detailed. Rappas’s model are more general. In one model from Rappa are in some cases at least two model from Business Model Navigator.

Taxonomies from different authors are very close to each other. Differences came up from which site author are looking on issue. If authors are looking on the customer site of the problem, they talk about what customer must pay for product/service.

And the second type is from organizations point of view. What is the source of revenues? This is obvious, for example, in this case, advertising and free model. For customer free model means that he does not have to pay for product/service. On the other hand, for business it means that revenues flow to the organization from advertisement. So product can be free for customers.

It is possible to divide real business models into some basic groups. First one is case when organization offers their product for free to users. Off course organization does not work for free, they need to pay bills. Revenues flow to organization from others channels than customers. For example from advertising or donations.
Second case is when organization offer basic level of their product/service for free, but premium program is for payment. It means, if customer wants something more, not only basic offering, he must to pay for it. Very common is combination of these two types.

References


The Implementation of the Second Pillar Pension in Serbia

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Abstract
The Serbian government has carried out many important reforms. Currently, government is facing a very difficult task - to realize the reform of social security and pension system. At the beginning of 21st century, Slovak Republic created a second pension pillar. It is possible to identify advantages and disadvantages of this second pension pillar, which is used in practice of Slovak Republic. The aim of the article is to propose the pension reform suitable for the Serbia, on the example of the Slovak pension reform. These proposals can be applied in practice.

Keywords: pension reform, II. pillar, Serbia, Slovak Republic

JEL Classification: J26, J32, H55

Introduction
Constantly aging population compels the state authorities to think about the solution for very serious problem which is increasing public expenditure on pensions. According to statistics, there are 2 060 216 working people in the Slovak Republic, but there are also 1 063 760 people receiving pensions. (SUSR) This shows that two workers belong for every pensioner. In terms of the ratio of workers: pensioner (2:1), we can conclude that state pension system is unsustainable in this relation and the average pension cannot exceed 36% of the average income. (If the contributions for social insurance are 18% of income and if the ratio is - two workers per one pensioner - the average pension should not exceed 2x18% of the average income.) Of course this can be a case if there are nothing in the pension fund and if we expect that current workers’ salaries were immediately transferred to pensioners. Currently, current pensioners worked and contributed to the pensions fund for 25+ years and that is the source of their pensions. But in the future, only worse situation predicts. We know that the birth rate is every year lower; we have more and more retirees in the country and fewer workers. The population is aging in the Slovak Republic. This caused also the constant increase in government spending for the pensions in the Slovak Republic, which ultimately can lead to serious state financial problems.

The structure of the economically active population divided into 5-year age groups points to the gradual aging of the workforce in the Slovak Republic. On the one hand, the number of economically active persons in age groups up to 35 years decreased year on year. On the other hand, the number of economically active persons in age groups from 35 to 44 years and age
groups over 55 years increased year on year. (Table 1 – Rate of economic activity of population aged +15, by age and sex (annual average in %)) (Ministry of labour, social affairs and family of the Slovak Republic, 2015)

Table 1 Rate of economic activity of population aged +15, by age and sex (annual average in %)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Total</th>
<th>2013</th>
<th>2014</th>
<th>Males</th>
<th>2013</th>
<th>2014</th>
<th>Females</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>59.3</td>
<td>59.4</td>
<td>68.1</td>
<td>68.2</td>
<td>51.0</td>
<td>51.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 19 years</td>
<td>6.1</td>
<td>6.4</td>
<td>7.4</td>
<td>8.0</td>
<td>4.8</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 24 years</td>
<td>51.0</td>
<td>50.6</td>
<td>62.4</td>
<td>62.0</td>
<td>39.1</td>
<td>38.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 – 29 years</td>
<td>82.2</td>
<td>81.0</td>
<td>93.0</td>
<td>93.1</td>
<td>71.0</td>
<td>68.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 – 34 years</td>
<td>83.2</td>
<td>83.0</td>
<td>96.7</td>
<td>96.4</td>
<td>68.9</td>
<td>68.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 – 39 years</td>
<td>88.8</td>
<td>89.1</td>
<td>95.7</td>
<td>96.4</td>
<td>81.5</td>
<td>81.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 – 44 years</td>
<td>92.2</td>
<td>93.3</td>
<td>94.2</td>
<td>95.6</td>
<td>90.1</td>
<td>90.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 – 49 years</td>
<td>91.0</td>
<td>91.7</td>
<td>92.5</td>
<td>93.0</td>
<td>89.3</td>
<td>90.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 – 54 years</td>
<td>87.2</td>
<td>87.0</td>
<td>88.6</td>
<td>88.5</td>
<td>85.7</td>
<td>85.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 – 59 years</td>
<td>73.5</td>
<td>74.9</td>
<td>81.9</td>
<td>82.1</td>
<td>65.8</td>
<td>68.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 – 64 years</td>
<td>21.8</td>
<td>22.4</td>
<td>32.8</td>
<td>32.0</td>
<td>12.3</td>
<td>14.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 years and over</td>
<td>1.7</td>
<td>2.0</td>
<td>2.8</td>
<td>3.3</td>
<td>1.1</td>
<td>1.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The situation with pensions is even worse in Serbia than in Slovak Republic. The financial and economic crisis has resulted in collapse of the Serbian economy as well as the collapse of the pension system. The biggest problem is not even a high number of retirees, but the low number of "real" employees (this term is used in Serbia for employees in the private sector) who create wealth and GDP. It is estimated that more than 700 000 people work in the state administration, which is extremely high number of real employees in the state with 7.5 million habitants.

The number of pensioners was around 1.74 million in Serbia in 2015. If the number of employed people is higher than 2.6 million people (700,000 people work in the state administration and unofficial statistics showed that there are 200,000 people working in state-owned companies), the ratio of employed people to the pensioner is less than 2: 1. In Serbia there are still more than 20 companies, the key state-owned enterprises that are in the restructuring and are waiting for privatization. State finances the basic fixed costs of companies, which includes the salaries of employees of these companies.

This article aims to analyze the possibilities of the pension reform in Serbia from the perspective of Slovak pension reform. The main hypothesis is that the implementation of a similar or identical pension system will lead to:

1. Serbian retiree will have a better standard of living.
2. The Serbian pension system will be more stable than it is at present.

**Historical development of pension funding in the Slovak Republic**

The performance of pension provision was the responsibility of the Workers' Social Insurance Agency until 1945. This insurance company was transformed into the Central Social Insurance Company in 1945. In 1948, it was changed to the National insurance company which took also the competence of the health care and operated until 1951. In 1952, a new organization on
administration of the pension insurance was established, namely it was a Slovak office of pension scheme. Assets of National possessions insurance companies were nationalized and all social activities came under the state control. Administration of retirement pensions has undergone through The Authority of the pension funding, since 1967.

Social security system passed through fundamental organizational changes after the Velvet Revolution. Retirement insurance and health insurance were again merged and their management took over the new institution - the Slovak Social Security Administration, from 1.1.1991 until the end of 1992. National Insurance was founded in 1993. It had to manage the performance of health insurance, sickness insurance and pension insurance. Each of the types of social security was made up of a separate fund that was financed from contributions from insured people. Association of health insurance funds and social security funds has caused the inefficiency in the functioning of the National Insurance Company. This has led to the introduction of health insurance companies and Social Insurance Agency (SIA). (Janač – Mariak, 2013)

Social Insurance Agency in Slovakia was founded on 1 November 1994 by Act No. 274/1994 Coll. as a statutory institution to administer the sickness insurance and the pension security substituting thus its ancestor the National Insurance Institution. As of 1 April 2002, the SIA has taken over from the Slovak Insurance Agency also the employer’s liability insurance in the case of occupational accident and occupational disease. As of 1 January 2004 SIA administers social insurance: that means the sickness insurance, the pension insurance – old-age and invalidity insurance, the accident insurance, the guarantee insurance and the unemployment insurance according to Act N. 461/2003 Coll. of laws. As of 1 January 2005 is SIA responsible also for approval and acceptance of contracts with Pension Asset Management Companies (PAMCs) which administer II. Pillar of the pension system i.e. the pension saving. In this connection SIA collects contributions for the II pillar and sends it to PAMCs. (SIA, 2015) SIA has been designated to be the competent and the liaison institution for the following branches of social security:

- Sickness benefit
- Maternity and equivalent paternity benefits
- Invalidity benefits
- Old - age benefits
- Survivors’ benefits
- Benefits in respect of accidents at work and occupational diseases
- Unemployment benefits. (SIA, 2015)

The Social Insurance System in Slovakia has been newly defined by Act No 461/2003 Coll. on Social Insurance effective as of January 2004. The Social Insurance System in Slovakia comprises apart from the sickness insurance, pension insurance and accident insurance, also of the unemployment insurance with the current inclusion of the legal form of providing benefits out of this system, and of the insurance in case of employer’s insolvency named the guarantee insurance. (SIA, 2015)

The pension system reform required a re-definition and creation of a new institutional framework of the new systems. The implementation of the new social insurance system is based on most recent trends and experience from countries that have launched the fully-funded pillar system earlier than the Slovak Republic. The pension reform has been designed to build up a modern system of social security in the Slovak Republic, based on three pillars representing an important mandatory public pillar (I. pay-as-you-go pillar), old-age pension saving system
(II. pillar). The new system of social security is enhanced through tax deductible voluntary saving/insurance schemes, supported by the state (III. pillar).

As it comes to the role of the SIA in the pension insurance as a whole, the SIA administers the I. pillar, and is responsible for collecting of contributions for the II. pillar as well as for registering of contracts with PAMCs. The retirement age introduced by the Act on Social Insurance is extended gradually (until the end of year 2023), and has currently been unified for men and women up to 62 years. The qualifying condition for entitlement to the old-age pension is 15 years of insurance and reaching the pensionable age.

Pension insurance is divided into old-age insurance (insurance in case of death and to provide income in old age) and disability insurance (insurance against a decline in earning capacity due to long-term ill health and in the case of death). The following are paid from the pension insurance schemes: old-age pension, early old-age pension, disability pension, widow's pension, widower's pension and orphan's pension. As of 31 December 2014, a total of 1,633,742 pension insurance benefits were paid (excluding pensions paid by the state, e.g. the so-called disabled at youth, spousal pensions, social pensions; as well as pensions paid out abroad and pensions not taken into automated registration). (Ministry of labour, social affairs and family of the Slovak Republic. 2015.)

Pension saving currently consists of old-age pension saving and supplementary pension saving:
- **II. pillar** – old-age pension saving, contribution defined, financed through capitalization, carried out by pension fund management companies pursuant to Act no. 43/2004 Coll. on Old-age Pension Saving and on amendments of certain laws, as amended (the Act on Old-age Pension Saving), which entered into force on 1 January 2005.
- **III. pillar** – supplementary pension saving, contribution defined, financed through capitalization, carried out by supplementary pension fund management companies pursuant to Act no. 650/2004 Coll. on Supplementary Pension Saving and on amendments of certain laws, as amended (the Act on Supplementary Pension Saving), which entered into force on 1 January 2005.

The aim of introducing old-age pension saving, which is a part of the mandatory pension system, was to diversify the risks of different methods of financing pension benefits, i.e. the continuous method of financing and the capitalization method of financing. (Ministry of labour, social affairs and family of the Slovak Republic. 2015.)

<table>
<thead>
<tr>
<th>Pension fund management company</th>
<th>Number of savers as of 31/12/2014</th>
<th>Percentage share of savers</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEGON, d.s.s., a.s.</td>
<td>174 375</td>
<td>11.90 %</td>
</tr>
<tr>
<td>Allianz – Slovenská d.s.s., a.s.</td>
<td>458 862</td>
<td>31.33 %</td>
</tr>
<tr>
<td>AXA d.s.s., a.s.</td>
<td>358 163</td>
<td>24.45 %</td>
</tr>
<tr>
<td>DSS Poštové banky d.s.s. a.s.</td>
<td>102 218</td>
<td>6.98 %</td>
</tr>
<tr>
<td>ING d.s.s., a.s.</td>
<td>147 839</td>
<td>10.09 %</td>
</tr>
<tr>
<td>VÚB Generali d.s.s., a.s.</td>
<td>223 376</td>
<td>15.25 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 464 833</strong></td>
<td><strong>100.00 %</strong></td>
</tr>
</tbody>
</table>

Number of old-age pension saving savers as of 31.12.2014 was nearly 1.465 million (Table 2). (Ministry of labour, social affairs and family of the Slovak Republic. 2015.)
Old-age pension saving (II. pillar) is contribution defined and financed by contributions to old-age pension saving paid to personal pension accounts of the savers. During 2014, there were no changes in the number or composition of the pension fund management companies. As of 31 December 2014, six pension fund management companies (hereinafter PFMC) operated on the market:

- Aegon, d.s.s., a.s., Bratislava,
- Allianz – Slovenská dôchodková správcovská spoločnosť, a.s., Bratislava,
- Axa d.s.s., a.s., Bratislava,
- Dôchodková správcovská spoločnosť Poštové banky, a.s., Bratislava;
- ING dôchodková správcovská spoločnosť, a.s., Bratislava,
- VÚB Generali, d.s.s., a.s., Bratislava.

Historical development of pension funding in Serbia

Serbian pension system can be analyzed only from 1990. This is the period after the breakup of Yugoslavia, where the single state controlled pension scheme existed which was based on Bismarck’s model. This system worked until 1990. In 1990, the war began in Yugoslavia and continued until 1995. Overall, war destroyed the financial system of Serbia. Inflation has moved more than 1,000% per day and pension funds were empty. During the 90 years of the 20th century, the assets of pension funds has not sold, which was caused by three factors:

1. The pension payments were delays, sometimes more than 10 months.
2. The pension contribution has increased (at the end of 2000 it reached its maximum of 32%).
3. Lack of resources in the pension fund was compensated by other income from the state budget.

All these facts artificially held pension fund "alive". Since 2000 till the present day, the share of pensions on the total GDP in Serbia is more than 12%. Reforms have occurred after the fall of Slobodan Milosevic’s government. Reforms began after 2002 also in the pension system. The Law on Pension and Disability Insurance for the first time define clear rules for pensions. 3 state pension funds are now in Serbia:

1. The Fund for pension and disability insurance of employees.
2. The Fund for Pension and Disability insurance of traders.
3. The Fund for pension and disability insurance for farmers.

Pension funds are financed by contributions (26% of gross salary), but it is not sufficient for financing over 1.7 million of pensioners. The difference between income from contributions and cost of retirement pensions is financed from other revenues of the state budget.

Pension reform in Serbia

The first major changes in pension systems began in Chile. The situation was critical, mainly due to the gray economy, incorrect management of pension funds and due to the large number of pensioners in relation to the workers. Pension reform was carried out in Hungary in 1998, Poland in 1999; followed by states - Lithuania, Estonia, Slovakia, and Croatia; and in 2005 also in Macedonia.

All these countries have some of the same problems that the existing pension system led to the collapse:
1. The aging population - steadily deteriorating ratio - the number of workers to pensioners
2. Incorrect management of pension funds
3. The gray economy
4. Too high pension contributions (for example in Hungary, the transfer to the pension fund reached to 34%). (Fultz – Elanie, 2003)

In Serbia, we can identify exactly identical problems that were in other countries that have implemented pension reforms. There are several ways to make the pension reform in Serbia. The possibilities are as follows: 2 or 3 pension pillars, rising the age of retirement, raising contribution in the combination with the implementation of pension pillars.

If we want to confirm the hypothesis of this article, we will look at the potential reform of the pension system in Serbia through the example of reforms in Slovak Republic. In that case, Serbia supposed to do the following steps:

1. Determine the percentage of revenues that will fund pension pillar I (state guaranteed pension fund) and the percentage to be funded II. pillar (mandatory private pension funds).
2. Define the benefits for pension savers in III pillar (voluntary private pension funds).
3. Define and implement the law - a method of managing the assets of companies that will manage the second pillar.
4. Determine the age limit for retirement and limit according to seniority.

A number of other details are necessary for the success of pension reform. For example, in Slovak republic there were forecasts that only 300,000 people enter to the II. pillar, but at the end of the period, the number of savers in II. pillar risen to around 1.5 million. A large network of financial advisors and intermediaries, who had obtained a commission for each client, was one of the main reasons for this unexpected phenomenon. Insurance companies have been other reasons.

In Serbia, the law does not recognize financial intermediation and therefore the reform should not support in this area. It is necessary to ensure the sales network, which would sell III. Pillar as well as to educate people about the necessity of saving for retirement. Nowadays in Serbia, only 4% of the population have life insurance (in the EU and the Slovak Republic, the number is above 60%). One of the reasons is just lack of information of citizens. (NBS, 2015) Low savings, bad economic situation and low solvency, lack of information of citizens and the faith that the State will take care of their pensions represent the main problems of Serbian situation.

Now there are private pension funds (Privatni penzijski fondovi, PPF) in Serbia that we can be compared to the Slovak II. Pillar. Saving is permitted only in dinars, but with inflation above 9%, the recoverability of invested finances is questioned. Moreover, the Serbian economy is dependent on imports and exchange rate for Dinar, for the last 10 years, is steadily weakens. That creates additional pressure on inflation. PPF are strictly regulated by the State, they are owned by private insurance companies and for PPF is possible to subtract the tax-free component. In addition, companies that pay PPF for its employees can registered this payment as a cost - up to 4400 RSD. Even with these advantages, PPF is not enough interesting for people.
Recommendations

At the end of this article we would like to describe some of the main recommendations. These recommendations are valid only if implemented system in Serbia will be similar to the model in Slovak Republic:

1. Since today there is a lack of funds in the first pension pillar, it is essential to set the ratio of payments to the government and the private mandatory pillar. It is recommended to gradually increase the ratio of contributions in favour of II. Pillar, which should prevent a sudden reduction of the inflow of funds to the first pillar and more jeopardize today's pensions. Serbian pension fund does not have sufficient resources to fund current retirees and start of the second pillar could lead to overflow and collapse of the pension fund. Slovakia also had to reduce the transfer to the second pillar, they wanted to save the first pillar.

2. Set the maximum amount of pension funded by the state. State pension funding services should apply only to finance the basic living needs and future pensioners should ensure everything else through III. Pillar or other investment.

3. Reform should focus mainly to the support of the third pillar. The first pillar should represent financial assurances for retirement, the second pillar should constitute a good life, and the third pillar should deliver future pensioners possibility of early retirement, high standard of living in retirement and should be a reward for many years of work. The most important support from the state are:
   - Tax relief
   - Regulation of pension funds - active support for the investment of pension funds
   - Marketing support and advertising.

4. It is necessary to calculate and determine the retirement age and a minimum level length of service immediately when the reforms start because it is important that all future retirees will know well these changes and they will to adapt it well

5. Allow the PPF also to invest in EUR and motivate sellers and financial advisors to sell this product that can largely help in building a pension annuity.

References


Marković B, Avdalović, M. Osiguranje i upravljanje rizikom, Biografika AD, Subotica


Increasing the Competitiveness of European Regions

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Abstract

Regional policy is a strategic investment policy targeting all EU regions and cities in order to boost their economic growth and improve people’s quality of life. The main objective of the research article is to analyze the regional policy of the European Union, its development and application in the Member States of the European Union. Regional development is a long-term strategy which must have clearly defined objectives and designed tools. The question of this article is whether it is possible to increase the competitiveness of regions by application of regional policy. This article analyzes the complexity and difficulties of bridging the competitiveness which divides states, regions, cities in Europe and raise question about the sustainability of the income convergence.

Keywords: cohesion policy, competitiveness, European Union, regional competitiveness

JEL Classification: O18, R11, R58

Introduction

The European Union is not a homogeneous entity in terms of competitiveness. Large disparities exist among Member States, with some countries performing much better than others and well above the European average. Disparities exist in terms of the historical development of the area, population, population density, language, religion, system of education, social system or the actual growth potential of the state. The main objective of European Union is to ensure the harmonious development of the territory and all of its parts. The European Union seeks to address economic, environmental and social disparities through legislation – creation of regional policy, structural policy later of actual cohesion policy. The focus of action is from bottom to top, the solution of disparities is leading from resolving the disparities between regions (cities) within the country to harmonize EU Member States.

Regional policy is a strategic investment policy which focuses on all regions and cities in the European Union. The aim is to boost economic growth and to improve the quality of people's lives. Solidarity is the main feature of the policy, because policy focuses on support for less
developed regions. A fundamental aspect of regional development is to reduce disparities between the regions and cities. Effectiveness of the use of EU funds must be observed. It is necessary to develop strategic management to make funds using effective, and to make regional development effective, too. Regional development is a long-term strategy which must have clearly defined objectives and designed tools. The question of this article is whether it is possible to increase the competitiveness of regions by application of regional policy. This article analyze the complexity and difficulties of bridging the competitiveness which divides states, regions, cities in Europe and raise question about the sustainability of the income convergence.

**Research objective**

The main objective of the research article is to analyze the regional policy of the European Union, its development and application in the Member States of the European Union. The partial goal is to analyze the policy for the programming period 2014-2020. Regional development is not a one-off activity, but it is a long-term strategy which has to be developed in great detail (the vision of the policy, objectives and strategic tools are important). This policy, which is applied in the context of ensuring regional development, must have sustainable character.

Regional development is very closely related to a region and its competitive advantages which affect the competitiveness of the region. Another partial objective is to determine the competitive advantages and to analyze the competitiveness of the regions in the European Union.

**Methods and methodology**

The intention is to follow the logical continuity of the articles ‘parts, the correctness and the adequacy of informations and data. First part is focused on the definition of the regional policy, the structural policy and the cohesion policy. Important task is to identify the differences between policies. This section is prepared by using the analytical methods – the analysis, the casual analysis, the synthesis, the induction and the deduction. Second part is focused on the definition of region and regional competitiveness. These two parts are based on literature review; it is based on available literature and studies.

The empirical part is based on statistics and surveys which were aimed to analyze the competitiveness of European regions. The current cohesion policy (2014-2020) is also analyzed in the empirical part. We analyze the possibilities of its implementation in the context of increasing the competitiveness of regions. Empirical part is prepared by using scientific methods – the analysis (the secondary analysis, the causal analysis). Article represents the basis of the planned long-term research which expected the use of more scientific methods.

**Policy of development**

Výrostová (2010) provided a very precise definition of regional policy. Výrostová referred to the definitions given in multiple publication, e.g. by Roger (1962), Wokoun (2003), Tödtling
and Maier (1998). Výrostová defined a regional policy based on the above authors as: "a set of objectives, measures and activities aimed at improving the spatial organization of economic activities, on reducing regional disparities and ensuring economic, social and territorial development of regions. Regional policy is carried out in close coordination with other policies that have spatial impacts - these include sectoral EU policies (e.g. the industrial, the common agricultural policy, the competition policy), but also the social, the fiscal or the environmental policy." Regional policy is an instrument for the elimination of regional disparities that arise spontaneously, on the basis of the unequal development of the territory induced by a variety of economic and social activities. It is implemented at the regional level, i.e. at the designated territorial subdivisions of States, and it works together with other sectoral policies. The action is carried out through the established financial instruments.

Regional policy was incorporated into primary law very gradually. Differences in the socio-economic development of individual regions of European countries could be identified since 1952, but great significance was not attributed to these disparities, at the beginning. Each state has managed its own regional development separately. It has been shown that the individual policies of the state are not suitable because the national differences began to intensify. Significant disparities could be identified between the different European regions over the time.

The European Union has engaged radical solution. Regional policy has become one of the priority areas of common policies. Institutions and instruments have been created, policies have been adopted. The European Union has decided to reduce disparities between regions. The Single European Act has defined “economic and social cohesion”. Since 1986, the European terminology also included the mentioned phrase that captures the basis of regional policy. Systematic and targeted regional analysis began by defining regional policy. The aim was to find differences and causes of different development. Recommendations were taken; objectives and strategies were designed, funds for regional development were allocated.

The Single European Act, Title V, and Article 130a says: "In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion. In particular the Community shall aim at reducing disparities between the various regions and the backwardness of the least-favoured regions." The Council instructed the Commission to make a proposal, which would harmonize the effect of structural instruments. The Community shall support the achievement of objectives by the action it takes through the structural Funds (European Agricultural Guidance and Guarantee Fund, Guidance Section, European Social Fund, European Regional Development Fund), the European Investment Bank and the other existing financial instruments. Since 1986 we can talk about defining regional policy, whose task is to find differences and causes of uneven development of regions. Recommendations were adopted; strategies, plans and objectives were determined to eliminate these disparities.

After some time the effect of regional policy focused on the structural differences in the sectors and sub-sectors, application of policy exceeded the border between country and the view was targeted to the whole territory. Structural policy was created. Structural policy represents an
instrument of economic and social cohesion of the European Union. Basics of structural policy were established in 1988. The adoption of the Delors plan I, in 1988, had the greatest impact on the design of structural policy. Okáli (2004) argues that regional policy operates in conjunction with structural policy; we argue that regional policy formed the basis for the formation of structural policy. According to the adopted Delors plan I, three separate policies have been integrated under one single policy, which was structural policy. Integration of regional policy with part of social policy and agricultural policy occurred. (Fiala - Pitrová, 2009).

It was necessary to modify the nature of the structural policy due to the increased number of Member States, of deepening disparities and the efforts to ensure regional development. The intention and policy objectives have been modified. The policy was again transformed. Use of funds has also changed. Solidarity policy was established due to a change of objectives and of extension territorial operation, even outside the regions of the European Union.

The policy crosses borders of the European Union. The aid is directed not only to the Member States and candidate countries; the European Union shows solidarity and cohesion to many other countries, regions and cities. The development of regional policy has moved through the structural and cohesion policy (made by Cohesion Fund), to the current form of cohesion policy (Structural Funds and Cohesion Fund).

Regional, structural policy, but also the solidarity policies operate through the Structural Funds. “Primary cohesion policy” existed and functioned alongside these policies. We have to distinguish these policies, because the “primary cohesion policy” worked through the Cohesion Fund. Cohesion policy operated through the Cohesion Fund should not be confused with actual cohesion policy. Influence on the development of regions is different. The Cohesion Fund was established by the Maastricht Treaty as 'a special fund’ designated to support environmental and transport projects in Member States of the European Union. Its creation was initially associated with aid towards Greece, Portugal, Ireland and Spain. The role of action was to help for integration of mentioned states in the European Union (they must to fulfil the criteria required for economic and monetary union). In essence, the cohesion policy directed to ensure the development of the state is designed to “eligible state”. (Lipková, 2006) Eligible states were those which GDP per capita is less than 90% of the EU average. The Cohesion Fund and this cohesion policy were focused exclusively on state. Objectives were the projects which must have expenditure higher than 10 million. EUR and financing was 50:50 (50% of the funding was from the European Union (The Cohesion Fund), 50% of the funding was from the state budget). Activities and projects are focused on the environment, actions to prevent flooding, construction of trans-European transport networks and the transport infrastructure projects of common interest.

Change of solidarity policy, due to its inadequacy, was agreed in 2006, by the adoption of changes for the Structural and Cohesion Funds. The change concerned an extension of policy and action. The reason was the need for cohesion among Member States and particularly the regions themselves. Actual cohesion policy incorporates the nature of the policy of solidarity,
which main principles and objectives are based on the structural policy, and “primary cohesion policy” as well. Cohesion policy is defined in the Treaty of Lisbon as economic, social and territorial cohesion and solidarity between states. The difference is the widening of its scope of territorial cohesion. Economic and social cohesion means - promoting competitiveness and green growth in regional economies and providing better services, greater employment opportunities and better quality of life for people. Territorial cohesion is essentially connecting to regions - to take advantage of their strengths and to cooperate in new and innovative clusters, attempt to respond to common challenges. Given that the policy has a strategic importance and acts by the decentralization of responsibilities, it means that the administration of each activity is delegated, so this policy has a key role in EU policies. Tools and targets have been adjusted to the action of cohesion policy. Tools and targets correspond to the actual needs of all interested countries and regions. Cohesion policy is aggregated term for consciously making changes in many areas of the internal market in order to reduce internal disparities of Union, resulting not only from the functioning of the market mechanism, but also from the historical development, geographical or climatic conditions.

Region

Many definitions of the region can be found by studying literature. The region is usually defined from a geographical point of view, in terms of its functionality, according to the purpose, on the basis of consistency of the actions undertaken, according to economic performance. For the purpose of cohesion policy, the region is defined under the Nomenclature of Territorial Units for Statistics established by Eurostat, the regions are divided according to population numbers. Regions are abbreviated as NUTS. These are artificially created regions - administrative regions. Administrative regions are established for the exercise of state administration and local self-government. Table 1 shows the application of the definition of NUTS in the Slovak Republic.

<table>
<thead>
<tr>
<th>NUTS categories</th>
<th>Number in the Slovak Republic</th>
<th>Territorial-administrative units covered by NUTS relevant in the Slovak Republic</th>
<th>European Union recommendations for NUTS - the average size of the region according to population numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>NUTS 1</td>
<td>1</td>
<td>The Slovak republic</td>
<td>3 000 000</td>
</tr>
<tr>
<td>NUTS 2</td>
<td>4</td>
<td>Bratislava self-governing region, Western Slovakia, Central Slovakia, Eastern Slovakia</td>
<td>800 000</td>
</tr>
<tr>
<td>NUTS 3</td>
<td>8</td>
<td>Bratislava self-governing region, Trenčín self-governing region, Nitra self-governing region, Banska Bystrica self-governing region, Žilina self-governing region, Kosice self-governing region,</td>
<td>150 000</td>
</tr>
</tbody>
</table>
The independent Slovak Republic came into existence on the 1\textsuperscript{st} January 1993 as the sovereign democratic state with the parliamentary form of the governance. With the expanse of 49035 m\textsuperscript{2} and with 5 404 322 inhabitants (reported on the 31.12.2011), 48.6\% of which are men and 51.4\% women, the Slovak Republic constitutes one of the smaller European states. In regard to its advantageous position (geographically in the middle of the Europe), the Slovak Republic is described as the bridge of the European Union (EU) to the east. The Slovak republic represents the important transit point for the market of non-European Union countries.

The economy of the Slovak republic is integrated within the frame of the global world economy. The Slovak republic is the member of GATT/WTO and from 2001 also OECD. In 2004 The Slovak republic became the member of the NATO. Since 1\textsuperscript{st} May 2004 the Slovak republic is the Member-State of the EU, therefore it takes part in the Single European Economic Area. The integration efforts of the Slovak republic within the area of the European Economic and Monetary Union were concluded on the 1\textsuperscript{st} January 2009 when the currency of the Slovak republic was changed into the uniform European currency – the Euro. The conditions for business activities are strongly influenced by the economy, however from the macroeconomic point of view it can be stated that the Slovak republic belongs among the countries which are interesting for investments possibilities.

**Regional competitiveness**

The concept of competitiveness is very often used in conjunction with the private sector. Recently, this term is also used in relation to countries and regions.

Competitiveness at the national level is based on superior productivity performance and the economy’s ability to shift output to high productivity activities which in turn can generate high levels of real wages. Competitiveness is associated with rising living standards, expanding employment opportunities, and the ability of a nation to maintain its international obligations. It is not just a measure of the nation’s ability to sell abroad, and to maintain trade equilibrium. (Ronald L. Martin). Competitiveness may be defined as the degree to which, under open market conditions, a country can produce goods and services that meet the test of foreign competition while simultaneously maintaining and expanding domestic real income (OECD, 2012).

Regional competitiveness lacks even a clear, widely shared definition. Instead there are several ideas proposed by academicians as well as policy making institutions. Bekes (2015) operates on definition by Meyer-Stamer and Dijkstra. Meyer-Stamer states that: “We can define (systemic) competitiveness of a territory as the ability of a locality or region to generate high and rising incomes and improve the livelihoods of the people living there.” While Dijkstra proposes: “Regional competitiveness can be defined as the ability to offer an attractive and sustainable
environment for firms and residents to live and work.” Mrva (2007) defines competitiveness as the ability to create, to maintain and to strengthen the own competitive advantages. The existence of a competitive advantages constitutes a factor that allows to achieve growth of competitiveness and thereby achieve the purposes of that increase of competitiveness pursues.

We can say that regional competitiveness is the ability of regions to generate income and to maintain employment levels in national and international competition. It is necessary for the regions to be able to identify its competitive advantages and exploit them to their advantage.

To improve the understanding of territorial competitiveness at the regional level, the European Commission has developed the Regional Competitiveness Index – RCI- which shows the strengths and weaknesses of each of the EU NUTS 2 regions. RCI was first published in 2010 as the result of a coordinated action between the Joint Research Centre and the Directorate-General for Regional Policy. The index development started in 2008 and builds on the methodology developed by the World Economic Forum for the Global Competitiveness Index. It covers a wide range of issues related to territorial competitiveness including innovation, quality of institutions, infrastructure (including digital networks) and measures of health and human capital. (Dijkstra – Annoni, 2013) The definition of regional competitiveness underpinning the RCI may therefore be summarised as: ‘the ability to offer an attractive and sustainable environment for firms and residents to live and work’. (Eurostat, 2015)

The RCI is a weighted composite measure of multiple dimensions (or pillars). Each dimension, that cannot be directly observed, is indirectly quantified by a set of indicators, statistically assessed and aggregated. Eleven dimensions are incorporated into the RCI. These different dimensions are aggregated into three sub-indices of competiveness and an overall composite index. The RCI therefore quantifies in a single index what may otherwise be difficult to measure: the level of competitiveness of an individual region. (Eurostat, 2015) Sub-indexes and dimensions are:

I. Basic sub-index
   i. Institutions
   ii. Macroeconomic stability
   iii. Infrastructure
   iv. Health
   v. Basic education

II. Efficiency sub-index
   vi. Higher education
   vii. Labour market efficiency
   viii. Market size

III. Innovation sub-index
   ix. Technological readiness
   x. Business sophistication
   xi. Innovation

There are not only wide variations in the competitiveness of EU Member States but also between regions within the same country. These differences in regional competitiveness within
a country highlight the limitations of analyses that are based on the national level and may evoke a debate about whether regional competitiveness gaps are harmful for national competitiveness and how they might be closed.

Map 1 shows the regional heterogeneity (except for six countries where NUTS level 2 coincides with the country level) of competitiveness across the EU in 2013 as measured by the composite RCI which is presented in relation to the EU-28 average. (Eurostat, 2015)

Map 1 – Regional competitiveness index, by NUTS 2 regions, 2013. (EU 28 = 0)

The most competitive regions in the EU in 2013, as measured by the RCI, were principally found in the north-west of Europe, comprising most regions in the Benelux countries, Denmark, Germany, Austria, Sweden and Finland, while high levels of regional competitiveness were also calculated for the south-east of the United Kingdom and northern France. Each of these regions is marked in purple on Map 1. In contrast, the least competitive regions were generally located in the south-east of Europe, in particular within Bulgaria, Greece and Romania, as well as in some of the French overseas regions. Each of these regions is marked in pale yellow on Map 1.
The Slovak Republic ensures competitive position of its regions against regions of other Member States and ensures the harmonious development of its territory by the implementation of cohesion policy. Regional gross domestic product (GDP) is used for the assessment of the economic situation of individual higher territorial units. It is noticeable the big difference between Slovak regions, especially between the rich Bratislava region and the rest of the Slovak Republic. Through support to SMEs (e.g. promoting employment and business support), it is possible to reduce disparities between regions.

![Regional GDP in Slovak regions (2010-2014)](image)

**Fig. 1 - Regional GDP in Slovak regions (2010-2014)**

*Source: Based on data of ŠÚSR (2016)*

**Cohesion Policy (2014-2020) and implementation in the context of increasing the regional competitiveness**

The EU’s cohesion policy has the goal of investing in growth and jobs and promoting territorial cooperation. Cohesion policy aims to reduce the disparities that exist between EU regions, promoting a balanced and sustainable pattern of territorial development. The current period covers years 2014–2020. During this period, expenditure of almost EUR 352 billion has been allocated for cohesion policy measures in the EU Member States. Table 2 shows total allocation for Cohesion policy period 2014 - 2020 (million EUR, current prices). Table 2 is elaborated according to the data of European Commission. (European Commission, 2015)

Priority is given to those regions whose development is lagging behind the EU average, with more than half (EUR 182 billion) of the total allocation set aside for less developed regions whose GDP is lower than 75 % of the EU average. The EU’s cohesion policy for 2014–2020 has 11 thematic objectives, which are covered by three principal financial tools (two structural funds and Cohesion Fund). Cohesion policy is implemented through three main funds – structural funds (the European Regional Development Fund (ERDF), the European Social Fund (ESF)) and the Cohesion Fund (CF).
Cohesion policy has set 11 thematic objectives supporting growth for the period 2014-2020:

1. Strengthening research, technological development and innovation
2. Enhancing access to, and use and quality of, information and communication technologies
3. Enhancing the competitiveness of SMEs
4. Supporting the shift towards a low-carbon economy
5. Promoting climate change adaptation, risk prevention and management
6. Preserving and protecting the environment and promoting resource efficiency
7. Promoting sustainable transport and improving network infrastructures
8. Promoting sustainable and quality employment and supporting labour mobility
9. Promoting social inclusion, combating poverty and any discrimination
10. Investing in education, training and lifelong learning
11. Improving the efficiency of public administration (European Commission, 2015)

Table 2 – Total allocation for Cohesion policy period 2014 - 2020 (million EUR, current prices)

<table>
<thead>
<tr>
<th>Country</th>
<th>Cohesion Fund</th>
<th>Less Developed Regions</th>
<th>Transition Regions</th>
<th>More Developed Regions</th>
<th>Total Cohesion policy*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>-</td>
<td>1039,7</td>
<td>938,6</td>
<td>2283,9</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>2278,3</td>
<td>5089,3</td>
<td>-</td>
<td>7588,4</td>
<td></td>
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<tr>
<td>CZ</td>
<td>6258,9</td>
<td>14824,0</td>
<td>-</td>
<td>21982,9</td>
<td></td>
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<tr>
<td>DK</td>
<td>-</td>
<td>84,0</td>
<td>329,2</td>
<td>553,4</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>-</td>
<td>9771,5</td>
<td>8498,0</td>
<td>19234,9</td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>1073,3</td>
<td>2461,2</td>
<td>-</td>
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<tr>
<td>IE</td>
<td>-</td>
<td>-</td>
<td>951,6</td>
<td>1188,6</td>
<td></td>
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<tr>
<td>EL</td>
<td>3247,0</td>
<td>6815,7</td>
<td>2591,1</td>
<td>15521,9</td>
<td></td>
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<tr>
<td>ES</td>
<td>-</td>
<td>2040,4</td>
<td>13399,5</td>
<td>28559,5</td>
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<tr>
<td>FR</td>
<td>-</td>
<td>3434,3</td>
<td>4253,3</td>
<td>15852,5</td>
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<tr>
<td>HR</td>
<td>2559,5</td>
<td>5837,5</td>
<td>-</td>
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<td>-</td>
<td>22200,4</td>
<td>1350,3</td>
<td>32823,0</td>
<td></td>
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<tr>
<td>CY</td>
<td>269,5</td>
<td>-</td>
<td>421,1</td>
<td>735,6</td>
<td></td>
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<tr>
<td>LV</td>
<td>1349,4</td>
<td>3039,8</td>
<td>-</td>
<td>4511,8</td>
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<tr>
<td>LT</td>
<td>2048,9</td>
<td>4628,7</td>
<td>-</td>
<td>6823,1</td>
<td></td>
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<tr>
<td>LU</td>
<td>-</td>
<td>-</td>
<td>39,6</td>
<td>59,7</td>
<td></td>
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<tr>
<td>HU</td>
<td>6025,4</td>
<td>15005,2</td>
<td>-</td>
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<tr>
<td>MT</td>
<td>217,7</td>
<td>490,2</td>
<td>-</td>
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<tr>
<td>NL</td>
<td>-</td>
<td>-</td>
<td>1014,6</td>
<td>1404,3</td>
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<tr>
<td>AT</td>
<td>-</td>
<td>72,3</td>
<td>906,0</td>
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<td></td>
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<tr>
<td>PL</td>
<td>23208,0</td>
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<td>-</td>
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<tr>
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<td>-</td>
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<tr>
<td>SI</td>
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<td>1260,0</td>
<td>-</td>
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<tr>
<td>SK</td>
<td>4168,3</td>
<td>9199,2</td>
<td>-</td>
<td>13991,7</td>
<td></td>
</tr>
<tr>
<td>FI</td>
<td>-</td>
<td>-</td>
<td>999,1</td>
<td>1463,8</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>-</td>
<td>2634,7</td>
<td>2538,9</td>
<td>11839,9</td>
<td></td>
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<tr>
<td>EU28</td>
<td>63396,5</td>
<td>179348,5</td>
<td>35915,4</td>
<td>456296,1</td>
<td></td>
</tr>
</tbody>
</table>

* The totals presented include a number of allocations with are not detailed in this table: Outermost and northern sparsely populated regions, European Territorial Cooperation (Cross-Border
Investment from the ERDF will support all 11 objectives, but 1-4 are the main priorities for investment. Main priorities for the ESF are 8-11, though the Fund also supports 1-4. The Cohesion Fund supports objectives 4-7 and 11.

The five targets for the EU in 2020 are:

- Employment: 75% of the 20-64 year-olds to be employed.
- Research & Development: 3% of the EU’s GDP to be invested in R&D.
- Climate change and energy sustainability:
  - Greenhouse gas emissions 20% (or even 30%, if the conditions are right);
  - 20% of energy from renewable;
  - 20% increase of energy efficiency.
- Education:
  - Reducing the rates of early school leavers below 10%;
  - At least 20 million fewer people in or at risk of poverty and social exclusion.
- Fighting poverty and social exclusion: At least 20 million fewer people in or at risk of poverty and social exclusion. (European Commission, 2016)

Conclusion

Cohesion policy has many specific characteristics that form it. These are the objectives, principles, tools, funding criteria which determine the eligibility of the regions to implement policies through the so-called. Euro-projects. Each region is characterized by territorial or economic and social disparities, but also characterized by its diversity. The aim of policy is to reduce disparities between regions but also to promote the positive diversity in them that for each region represents a competitive advantage.

Fostering competitiveness will require further improvements in eliminating the barriers to a truly integrated market for services and ensuring compliance with fair-trade rules. European Union should prioritize its investments to foster a smarter European economy by creating an integrated innovation system. One of the solutions could be the effective and genuine application of cohesion policy. Nowadays, the focus of the current policy and its control and reporting is really good regulated. We can conclude that increasing the competitiveness of the regions is possible by application of cohesion policy.

References


The Current Situation of Unemployment Rate as a Long-Term Issue of Sustainable Development in the Selected V4 countries

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Abstract

This contribution will present detailed analysis of unemployment rate in context of selected countries of European Union. This analysis will be confronted with the economy of Slovak Republic in order to secure sustainable development and at the same time comparisons will be made in order to predict the development of this particular macroeconomic indicator in conditions of countries with similar historical, cultural and social evolution, such as Visegrad (V4) countries – Slovakia, Czech Republic, Poland and Hungary with special emphasis on Slovakia and Czech Republic.

Keywords: unemployment rate, sustainable development, V4 countries

JEL classification: E23, Q01

Introduction

Unemployment is a manifestation of macroeconomical imbalance and it is a measure of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labour force. At the start of transition period in Slovakia during early 90’s, was not even officially known, and now represents one of the most serious problems of economic and social policy. Unemployment at the beginning of the transformation process of transition from a centrally planned economy to a market was created as a result of reduced economic performance.

Accompanying phenomenon of the transformation process of the Slovak economy after 1990 was the increase in unemployment, which first appeared in 1991, when the average registered unemployment rate reached 6.6% (in 1990 it was 0.56%). This conversion occurs in arms production and begins the process of privatization. Growth rate continued in the first quarter 1992. In the following months there is a decrease in unemployment and then slow stabilization. The average registered unemployment rate that year was 11.4%. With the restructuring of the property occurred at the same time removal of excess employment, with the result that shaped unemployment. If we assume that in the period of centrally planned economy until 1989 there was over-employment, it survived even in the first years of transformation.

Unemployment has been and continues to be a long-term problem of the EU economies, which could not be completely solved even at the time when many of them reached higher economic growth. The unemployment rate exceeded the ten percent threshold since early ’90 (in the statement by the registered unemployed). Relative rapid accumulation of the number of unemployed was in addition to the initial transformation recession caused by the slump in domestic aggregate demand is also affected by the decline of some productions, especially
military equipment and of course in many more sectors. The problem of unemployment has been given only by cyclical developments in the economy, but above all it was a problem of a structural nature.

**Development in Slovakia**

In Slovakia during next years 1990 - 1993 there was a significant decline in production which is related to the growth in the unemployment rate. GDP at constant prices fell from 599.2 billion SK (1990) to 460.8 billion SK (1993). Fall in GDP occurred mainly due to the decline in domestic demand, which involved all the major components. Relatively strongest effect had decrease in household final consumption and gross formation of fixed capital. Household final consumption at constant prices decreased from 370.2 billion SK (1990) to 244.4 billion SK (1993), gross capital of 194.5 billion SK (1990) to 121 billion SK (1993). At the beginning of the 90’s there was a concurrence of issues - the fate of the market in Eastern European countries, inherited internal debt, banking and budgets, oil shocks, the unification of Germany, the Gulf War. Trade with the USSR was problematic, an agreement closed with difficulty for 1991 secured export only to the extent of 30% in 1990, despite the fact that the government tried to maintain economic relations at the national level as well as businesses. After the start of monetary union in Germany interest dropped sharply in connection to Czechoslovak goods, so the trade balance in relation to the former GDR in 1990 ended in a deficit of $ 1 billion.

The social system was set up so that the population of the suit to be registered with the employment services receive social benefits while working illegally. Undeclared work is if the individual is engaged in paid work for a legal entity or a person and has not based employment
A foreigner and does not have a temporary residence permitted for employment and work permission or job seeker and fails to notify office, as it is his duty. At the end of 1998 the unemployment rate stood at 15.62%, but in June 2000 it was already 19.1% and Slovakia kept the first place in Europe in terms of the unemployment rate. At the time when the new government was taking the office at the end of October 1998 the situation culminated in Slovakia and macroeconomic imbalances threatened to grow into financial crisis. Slovak economy showed double deficit, while the deficit of the current account deficit in 1996-1998 exceeded 10% in GDP. Macroeconomic situation, which resulted in rating downgrades, high interest rates and the exchange rate regime change in early October 1998 from the government that took office at the end of the month, requiring the swift adoption of stabilization steps. Several measures in the field of microeconomics (changes of the tax system) has created conditions for starting fast and sustainable economic growth. Deficits of public budgets had been one of the two main problems of the Slovak economy. Unsustainability of trend of budgetary performance was significantly determined by the nature of further economic policy. In the first quarter of 1999 worked provisional budget, which was given by limited time opportunities for the preparation of national budget, since the government elected in the autumn came up with a completely new budget. This budget did not correspond with the real options of economy. The government was committed to direct its fiscal policy to a balanced budget, and came under pressure from weakening exchange rate to stabilizing measures.

The first response of the government to the arisen economic situation has been document which can be designated as the first package of economic measures adopted by the new government on January 7, 1999. Thus, the government has set for the inventory program to deal with negative trends in the economy and to lay the foundations for sustainable growth in the next period. This concept consisting of seventy tasks aimed at restoring fiscal discipline, reducing costs and stimulating public budget revenues and to accelerate restructuring and increasing of the competitiveness of the Slovak economy. Internal imbalances of the economy, while for the period January-June 1999 declined slightly but without significant improvement of fiscal developments. In addition to the increase in regulated prices of electricity, heat, water, rent, increased excise taxes on fuel, wage freeze in the civil service and reducing capital expenditures were not made further major steps to improve public finances.

A crucial step in calming the situation on the financial market was the announcement concerning the preparation of the second economic package on May 20, 1999 (approved 05/31 as a program of recovery). In terms of economic impacts on the population was the complex of measures incomparably tougher than in January and most likely supported the decline in popularity of the ruling coalition among the population. Its basic measures were focused on the following objectives:

1. by introducing an import surcharge of 7% to 75% of total imports to all countries increased price competitiveness of domestic producers on the domestic market and thus reduce internal imbalances of the economy, while an increase in budget revenues (import surcharge in 1999 meant additional revenue budget of 8.4 billion SK).
2. through selected measures to redirect parts of household financial flows in favour of the state budget and "network" companies and increase their commitment to solving the problems of the economy, it was all about:

   a) Increase lower rate of value added tax from 6% to 10% (from 1.7.1999)
   b) Increase in excise taxes on fuel and cigarettes (from 1.7.1999)
   c) Growth of regulated energy prices, gas, rent, telecommunications and administrative fees,
   d) Through cuts in social networks (the reduction amount and timing of payment of unemployment benefit, sickness benefit restrictions or elimination of state administration) directly contribute to the reduction of expenditure under public budgets.

These restrictive measures subsequently influenced the negative growth rate of unemployment in 1999 in form of a significant increase in unemployment and in December reached its critical level of 19.18%. To halt and reverse the unfavourable economic developments in May 1999, the Slovak government stabilization package of short-term and medium-term nature was used, the implementation of which began to manifest itself in 2000 with indicators on economic development.

In 2000, the unemployment rate fell to 17.88%, but in early 2001 was set to increase again to 20.05%. Slovak Republic in order to reduce unemployment and create jobs decided to create favourable conditions for foreign direct investments and promote small and medium enterprises at home. In 2004, when we joined the EU, there was a significant fall in unemployment and the entry of large foreign investors leading to strong economic growth.

Registered unemployment rate (according to ÚPSVaR) reached in Slovakia at the end of 2005 nearly 11.36%. In 2006, unemployment decreased gradually. The registered unemployment rate in the second half of the year fell below the psychological threshold of 10% and by the end of 2006 reached 9.4%. In January 2007, with new update of Law no. 389/2006 about Employment Services, which aimed to improve the targeting of active measures implemented in the labour market. This year there was a decline in unemployment to historic lows since the establishment of the Slovak Republic. After long-term growth of the economy at the end of 2008 started stagnation, which was caused by the financial crisis. In Slovakia there was exceeded supply over demand, the consumption of the population declined sharply, resulting in the collapse of companies, businesses and organizations, leading to collective redundancies, thereby dramatically increasing the unemployment rate. According to Eurostat, in 2010 it was the unemployment rate in Slovakia at 14.4%. From 2009-2012 unemployment was growing under the influence of the economic crisis. However, due to the many national and European measures, the situation turned slightly and the unemployment rate in 2014 declined from 14.44% to 12.2%.
Czech Republic has EU’s lowest unemployment rate, at 4.5%, the country tops Germany as unemployment rates approach 10-year lows. It’s a small jump from the 4.6% rate reported in November, but well enough for the Czech Republic to pass Germany for the lowest rate of unemployment in the EU. The average rate across all 28 member states is 9.1%. At 5.0%, Malta and the United Kingdom come in 3rd and 4th. Cyprus, Croatia, Spain, and Greece round out the bottom of the list at 15.7%, 16.5%, 20.8%, and 24.5%, respectively.

At 4.5%, the unemployment rate in the Czech Republic is at one of its lowest points over the past decade. Czech unemployment reached a low of 4.2% in 2008 and a high of 7.8% in 2010. The past two years have seen a steady decline.
In comparison with Slovakia and taking into account similar development background, Czech Republic never reached 10% unemployment rate.

**Low unemployment rate in Czech Republic**

Six factors are generally cited as playing a role in low Czech unemployment during and after economic transformation: the low international value of the Czech crown, the human capital of the Czech work force, tripartite wage setting with a view towards maximizing employment, the efforts of Federal employment offices, market-oriented labor policies, and the small size of the agricultural sector of the economy.

The Czech Government drastically reduced the value of the crown on international currency markets and took actions to keep the rate low. Although this action was not unique among Eastern European nations, the degree of the currency devaluation, coupled with the productivity of Czech workers, reduced the unit labor cost of goods far below that of Hungary or Poland, as well as neighboring Germany.

Workers with greater levels of education and training are thought to be more adaptable to the changes in jobs that occur with economic transformation. Hence, to the extent that Czech workers are better educated and trained, they could have an easier transition to a market economy and lower levels of unemployment.21 Workers in the Czech Republic are perceived by employers as having a high level of education, on a par with that of Germany or Switzerland and higher than that of France. The Czech work force has a large share of highly educated workers, with more than 9.2 percent of employees holding a university degree, compared with only 6.8 percent in Slovakia.

After the fall of the command economy, legislation was enacted that set up a new system of wage determination in Czechoslovakia. A tripartite assembly of government, labor, and management was formed to determine national wage levels for industries. Firms could exceed these guidelines, but at a cost of paying a substantial penalty based on the degree to which their total wage bill violated the guidelines. The system was removed for a while, but was reinstituted in the Czech Republic after the breakup of Czechoslovakia. Wage increases were held to levels...
below the target levels by a desire on the part of employees, trade unions, and management to limit layoffs. Real wages fell, but the decline in employment was less than it might otherwise have been, and the resulting number of workers laid off was smaller.

The scope and degree of activities of the Czech Public Employment Service have exceeded those of other nations and contributed to reducing unemployment during the transition. The service engages in active labor market policies that include job counseling, the exchange of information, and training, as well as more direct activities, such as subsidizing employers and creating jobs in the public sector.

The Czech Government’s adoption of labor market policies in the areas of minimum wages and unemployment benefits has more of a free-market orientation than a social protection one. These policies have had the effect of reducing unemployment rates, but clearly, not without some burden on workers. The minimum wage in the Czech Republic has been set at a low level and has not kept pace with recent Statistic Hungary Poland levels of inflation. In January 1995, the legal minimum wage amounted to only 27 percent of the average wage. As table 3 shows, this is consistent with a greater share of workers earning less than half, and a greater share of workers earning less than two-thirds, of the median wage than in Hungary or Poland.32 Further, unemployed Czechs will be likely to accept job offers at low wage levels, given the relatively small levels of unemployment benefits they otherwise receive. In 1995, the benefit level was 24 percent of the average wage in industry. The maximum duration of benefits, 6 months, is also especially short, compared with that of other European and former Eastern bloc nations. In short, low minimum wages, low levels of unemployment insurance benefits, and the short duration of such benefits have made it more expensive for unemployed people in the Czech Republic to continue their search for work. Instead, many of them take low-wage jobs, keeping unemployment rates relatively low.

The economic transformation that reduced the level of publicly owned enterprises in the Czech Republic has had a major impact on the agricultural sector. Privatizing farmland would most likely lead to a more direct relationship between output and compensation for farmers and greater productivity per worker. Greater productivity would reduce the need for agricultural workers to produce the same crop level. These workers would possess few skills that could transfer to other sectors of the economy, representing a potential unemployment problem. Given the role of the Czechoslovakian economy in the old CMEA trading bloc—that of the economic forge, and not the breadbasket, of the council—there was relatively little employment in the Czechoslovakian agriculture sector and even less in the Czech portion of the nation. In 1989, prior to the transformation, only 11.1 percent of the work force in the Czech region of Czechoslovakia was employed in the agricultural sector. Although the figure had fallen to 5.3 percent by 1995, the decline still did not require the relocation of as many workers as in other Eastern European nations. The result was less structural unemployment due to a mismatch of skills of displaced agricultural workers and less frictional unemployment, with fewer people needing to search for new jobs.
Conclusion

From what was stated before we can clearly distinguish mistakes that were made during the transition era and shortly after the formation of independent Slovakia. Carelessness of govermental bodies caused more damage and that negative influence still persist throught many wrong decisions. Policies such as apprenticeship schemes aim to provide the unemployed with the new skills they need to find fresh employment and to improve the incentives to find work. Many people have the right skills to find fresh work but factors such as high house prices and housing rents, family and social ties and regional differences in the cost of living make it difficult and sometimes impossible to change location in order to get a new job. Many economists point to a persistently low level of new house-building as a major factor impeding labour mobility and the chances finding new work. Government subsidies for businesses that take on the long-term unemployed – for example, as part of the UK Youth Contract, payments of up to £2,275 are available to employers who take on young people (aged 18-24) who have been claiming JSA for more than six months.

Full-employment does not mean zero unemployment. There will always be some frictional unemployment – it may be useful to have a small surplus pool of labour available. Most economists argue that there will always be some frictional unemployment of perhaps 2-3% of the labour force. But with help of above mentioned policies there is a room for decresing unemployment rate in Slovakia from current 9.6%.

References


Ethical banks – phenomenon or overstatement

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Abstract
The establishment of many ethical and alternative banks after 1975 tried and is still trying to take back the threads of social ideals and consequent ethics which have never been split. This meant finding a third way through economic ideals which have either disappeared or are undergoing serious theoretical or operational difficulties and give back impetus to the civil economy which underlines the role of social and economic relations in the market and not only in profit maximalization.
The crisis in the financial markets unexpectedly turned a spotlight on the ethical aspects of financial markets and financial institutions as a topic of considerable interest to the wider public. At the same time, it unleashed a debate about the future of capitalism which throws down the gauntlet to philosophers and economists. The financial crisis is not only a crisis of the economic systems, but also a crisis of ethics for financial intermediaries, whose conduct threatened to turn the financial industry into a field of unmitigated self-enrichment.
The aim of this paper is to analyse possibilities and trends in ethical and alternative banking. Because most of the ethical banks are transparent in their management and disclose operational funds, providing the customer with opportunities to choose the interest rate and the sector or project that utilizes our savings.

Keywords: ethics, banking, opportunity, social banks, sustainable finance

JEL Classification: G21, O35

Introduction
It is generally accepted that markets provide the most efficient economic system to facilitate economic growth through wealth creation. In an ethical sense this is a good – a desirable objective as it enables humans to flourish. Markets are conventionally seen as offering benefits to all users by providing for fair or best pricing to be achieved, and by having a high level of transparency so that informed and fair decisions can be made. The benefits of markets are rapidly apparent across the globe today. The improvement in the standard of living in many societies is a direct consequence of wealth creation enable by market capitalism. There is evidence for this following the collapse of Communism in Eastern Europe in the 1980s and 1990s, with the transformation of former state-controlled command economies to market-base economies. Similarly, the recent emergence of rapidly developing countries such as China, Brazil and India demonstrates the impact of effective markets and capital investments. (Reynolds, 2011)

Yet wealth creation brings with it social costs, such as global warming and its effect on the lives of many through rising sea level, flooding and droughts – hence the attempts to find market-
based solutions to that problem, such as emissions trading. As with so many things, there are positive and negative elements to market capitalism. From an ethical perspective, capital market activities and fulfilling market demands for services can be seen as potentially beneficial: facilitating commerce, encouraging market efficiency and providing essential services on more or less competitive terms.

Banking ethics

The entire arena of finance impacts on the economy and society is therefore closely regulated in all countries. However, not all ethical concerns can be covered by laws. In financial markets, legal provisions concerned with ensuring fairness and preventing fraud. In financial services, the ethical concerns relate to fiduciary responsibilities. Financial management issues relate to good corporate governance that considers all stakeholders. (Boathright, 2002)

The empirical research highlighted different ethical concerns, many of which are the same across the various theories. Many of the concerns will reappear in the empirical material independently of their ethical elaboration. This implies a basic ethical framework is in place that is relatively robust even in the face of variations in metaethical position. Therefore, a framework of three principal values is proposed as essential for a bank that truly espouses ethical conduct: responsibility, fairness and honesty. The above-stated values of responsibility, fairness and transparency are what would be expected of ethical persons and institutions in every society. The same principles should be applied in examining banking conduct, and higher standards should be demanded due to the trust that customers place in banks. (Villa, 2015)

Banks have diverse obligations: to the regulators in term of compliance, to shareholders in observing good corporate governance and achievement of corporate goals including profitability, and to other stakeholders including employees and communities so that they need are satisfied and they are adequately protected. Above all, a strongly help opinion is that the moral responsibility of a bank towards its customers is most important. A responsible institutions must therefore consider possible future eventualities that could affect its customers because only by looking after customers can it maintain its integrity and demonstrate its trustworthiness. A bank should treat all its customers fairly so that no individual or entity is disadvantaged. It is an economic reality that there are gross economic inequalities among individuals, corporations and nations. The gravest drawbacks afflicting individuals are economic hardship, which renders them prone to manipulative practices by unscrupulous bankers, and financial illiteracy that could lead to their inability to comprehend the intricacies of financial package being offered to them. Transparency or honesty is a value that everyone regards as highly important in any bank, in its reporting to its shareholders, in its interaction with its community and employees and other stakeholders, and most specially in its dealings with its customers.

Ethical theories were investigated: some defined the right action in terms of the maximum amount of utility and happiness it could bring, or what became known as utilitarianism, which sought to establish moral conduct for individuals, some approaches argued for freedom from government controls in favour of the pursuit of self-interest with the contention that good consequences would inevitably result from laissez-faire, others invoked universal principles that could be gleaned through reason in the Kantian tradition that sought to identify duties that were incumbent on individuals. Finally there were arguments in favour or virtue ethics or practical wisdom as a necessary virtue that thought to be encouraged in workplaces. (Villa, 2015) An important ethical consideration, therefore, its type of market concerned. An unfettered
labour market, for instance, could create extreme inequalities, leaving those at the lower end living in poverty, and so there is an argument for such a market to be regulated with minimum wage legislation. Within other markets, it could be argued that minimum intervention and maximum openness is desirable to ensure the most efficient allocation of resources. A market that operates in an inefficient or dysfunctional way, either because of the way it is structured or because of the negative influence by key institutions, is a concern. This was understood by no less a figure than Adam Smith, who is regarded by many as the founding father of free-market economics through his great work The Wealth of Nations (Smith, 1776). Smith makes clear the dangers of potential market abuse as people pursue selfish ends. Smith’s, also great, Theory of Moral Sentiments is about moral philosophy. Different markets raise different issues, including ethical ones.

The purpose of banking is to serve the community by enabling its constituents to save and protect hard-won earnings, fulfill dreams of home ownership and achieve ambitions of generating wealth. As banks grew in size, they increased the number of branches as well as personnel. With the growth came effort to consolidate and streamline the operations. What might have started as attempts at efficiency and modernization, such as the use of computerized credit scoring for loan applications, automated teller machines and the ubiquitous call centres has resulted in a diminution of customer interface. These advances have meant less personal contact between the banks representatives and the customers, therefore current attempts to get to know the customers are scripted from a template that bank employees are obligated to observe as part of their due diligence and compliance. If one looks at modern banking through the eyes of Kant, one would probably argue that banks have long ago stopped treating their individual customers as persons or ends in themselves but rather as means to the end of maximizing profits. (Villa, 2015) The American sub-prime crisis visibly illustrates how sub-prime mortgage lenders had become so detached and inured to the plight of average individuals that they did not even concern themselves with sensible questions such as whether the borrowers had jobs and how they expected to repay the loans. Because they were not interested in their customers as persons, these lenders ignored prudent practices requiring a maximum loan limit in relation to the property’s appraised value, a mandatory minimum down payment and proof of regular minimum income.

**Ethical banks**

Not all banks have profit as their overriding objective. Several banks make it their mission to create social and environmental benefits, by carefully choosing which companies and projects they provide finance to. We know all too well what an excessive focus on profit can lead to: beyond putting the needs of customers far too low down on the priority list, profit-focused behaviour leads to big banks financing everything from manufactures to the most polluting fossil fuel projects on the planet, as well as causing asset bubbles and financial crises. There are other approaches that are constantly gaining in success. Whether it’s by adopting an ethical policy that excludes lending money to environmentally or socially detrimental projects, or actively focusing on lending to companies and organisations that have a positive impact.

By moving money to one of these banks, everyone can be sure that their savings are being used to create positive social or environmental impact, whilst also generating a healthy return in a safe place for their money. Example of three biggest ethical banks are coming in the names Triodos Bank, Charity Bank, Co-operative Bank.

Triodos Bank’s mission is to provide finance for organisations with a positive environmental, social or cultural impact. And it has already achieved a lot. Tha bank has so far financed 376
environmental projects across Europe, generating enough electricity to power 2.8 houses for every Triodos customer. It also supports a range of impactful cultural and social projects. Triodos is also at the forefront of improving the culture of banking. In an industry dominated by men, the percentage of their management team who are women has increased to around 40%. And where high street bank executives earn more money than they could ever need, the ration between the highest and lowest salary within Triodos is always kept below 10:1, with no executive bonuses paid. Most importantly, the bank publishes details of every organisation they lend to and invest in, so everyone can know exactly what their money is being used to support. Combine with the bank’s low risk profile and excellent year-on-year performances, it’s no wonder that Triodos is considered one of the world’s foremost ethical and sustainable banks.

Charity Bank was always going to be different. What drives them isn’t profits, but a shared idea about the world society want to live in. Charity Bank founded to support charities with loans that they couldn’t find elsewhere and to show people how their savings could be invested ethically and in ways that would make them happy. Today, charities have never been more needed, but also more challenged. That’s why Charity Bank’s promise is more important than ever. Their promise is supporting charitable activities and helping people to save and so good. As we should find included in their own characteristics: they are the bank for people who believe that banking should always work for good. Since 2002 it has agreed to lend more than £250 mil. To charities and social enterprises, making a difference to the lives of more than one million people from across the UK. In a Charity Bank savings account, money is a powerful force for good. Charity Bank works to show people exactly where their money goes through social impact data and stories, as well as events which showcase the extraordinary achievements of the organisations it supports.

The Co-operative Bank is often seen as the original ethical bank and not without reason. In was the first UK bank to introduce the Ethical Policy back in 1992, which blocks investments in key “unethical” area such as weapons manufacture, for example. To Co-operative Bank believes that good business and ethics go hand in hand. They succeed by providing their customers with an ethical choice and, with success, our ability to effect positive change grows. The bank’s majority ownership by hedge funds, since October 2013, has placed question marks over the sustainability of the Co-op’s ethical lending approach, as have a number of serious difficulties that the bank has experienced over the past couple of years. Yet today the banks ethical policy in enscribed in its constitution for the first time in its history, whilst the bank still retains a strong high street presence to rival the Big 5 banks. With these important distinctions and an MYM switch score that still far outshines any of the Big 5, the Coop’s days as a recommended ethical bank are far from over.

**Ranking of ethical banks**

The Move Your Money is a national campaign for a banking system that helps to build and support a just and sustainable society, rather than understanding it. We aim to provide people with the information and confidence they need to make informed decisions regarding the types of financial institutions that they want to support, and opportunities to take action to make the banking system better. They also would like to strengthen the ethical banking sector, and broaden and enhance the debate on financial reform. They are independent non-profit organisation – group of volunteers working to raise awareness about the broad range of financial institutions available to individuals in UK.

As an example of this not-for-profit organization we would like to describe their system of Bank Ranking Scorecard, which is bringing the better understanding of ethical banks and their
environment. In September 2013, after conducting a nationally representative survey (UK), they found that the area of banking that mattered most to the public were honesty, customer service, culture, impact on the real economy and ethics. This scorecard was covered over 100 times in mainstream media, and to date remains the only bank ranking system that uses public, open, and quantifiable methodology to assess the sustainable and ethical credentials of financial institutions.

We would like to look little bit closely to the 5 key principles mostly mattered to the public:

(1) **Honesty**
This category examines the general conduct of a financial institution, and look at whether they have received fines for criminal activities, like rigging markets or money laundering; a record of using recognised tax havens and tax avoidance structure; lobbied against effective change in the banking sector; ever been punished for faulty or misleading advertising.

(2) **Customer Service**
Financial institutions play a critical role in our daily lives, as well as in the wider economy. Their ability to lend credit is also crucial to providing jobs and opportunities for individuals and businesses. But banks also rely on our custom for their businesses to survive. This customer service category looks at: how many complaints the financial institution receives, relative to their number of customers; whether they mis-sold PPI and other complex financial products; how often the Financial Ombudsman Service is called in to settle complaints disputes; the performance of the organisation in Which? Customer satisfaction survey.

(3) **Culture**
In the aftermath of the banking crisis, many analysts asked whether the male-dominated, extortionately paid and bonus-fuelled financial sector was culturally disposed to taking excessive risks with our money. Despite playing such a central role in our societies, many financial institutions also remain completely impervious to public and customer accountability. As a result, our metrics on the culture of a banking institution examine: how much power the organisations customers or members have in influencing its policies; whether directors’ pay is disproportionate, excessive or unreasonably high; the bonus culture at the organisation, which includes all forms of variable remuneration such as shares deferred payments, and long-term incentive schemes; the proportion of women on the board of the organisation.

(4) **Real economy**
Banks and building societies developed from the need for saving and lending functions for people and businesses. Supporting the real economy category assesses are: Whether the organisation endangers the very stability of the entire system by remaining too big to fail; the amount of risky behaviour the organisation is involved with through disproportionate use of speculative financial derivates; what proportion of the organisation’s assets support the real economy, by providing real people and business with finance, rather other banks and financial markets.

(5) **Ethics**
Using Ethical Customer’s Ethiscore, ethics metrics look at a financial organisation’s impact in a number of areas, including: financing fossil fuel extraction and climate change; respect for human and workers rights; sustainability policies and positive investment; investment in unethical industries such as arms & weaponry, industrial food production, etc.
Table 1: The Move Your Money Scorecard

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<td>Virgin Money</td>
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<td>Britannia</td>
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<td>Co-operative Bank</td>
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<td>Smile</td>
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<td>Clydesdale Bank</td>
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<td>Salisbury’s Bank</td>
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<td>Yorkshire Bank</td>
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<td>Bank of Ireland</td>
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<td>Post Office</td>
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<td>Tesco Bank</td>
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<td>Clybank</td>
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<td>Bank of Scotland</td>
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<td>Birmingham Midshires</td>
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<td>Lloyds Bank</td>
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<td>Marks &amp; Spencer Bank</td>
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<td>Coutts</td>
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<td>Ulster Bank</td>
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<td>Barclays</td>
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Trends in ethical banking

Using money as an instrument for social change can bring a breath of fresh air to the banking sector. Apart from traditional payment services, the bank’s core activities include lending to sustainable projects and social entrepreneurs, taking in saving from committed depositors, special purpose fund management, ethical screening services, and sustainable private banking. Some of these and the innovative processes of human resource management and internal organisation exist in order to demonstrate how an ethical approach to banking can be integrated in business and organisational processes. The lending policy integrates both positive criteria and negative criteria. The elements of policy and practice concerning lending are innovations with ethical considerations and demonstrate the quality of internal ethical and social standards. From this perspective and in the context of innovations we should define following elements: the bank’s loan book in 100% mission based (ethical, social and development aspects in the mission); choices of lending are strict and clearly defined and are only in selected key areas and subsectors; the degree of transparency on lending activities is very high due to systematic publications on the lending activities; and the bank closely consider the motivations of the people involved in a loan application as much as their trustworthiness.

Ethical banking as it has been described above stands in a historical line of continuous search for the application of ethical principles in banking and is in line with broader trends in the 20th and 21st centuries such as the emergence of civil society and the new social class of cultural creatives, growing consumer awareness, social justice and environmental movements and the growing recognition of social entrepreneurship, to name a few. Some questions require continuous attention: Will this emerging financial business sector be able to achieve the relative scale and the professionalism to challenge the dominance of mainstream finance? Will the exceptions of the financial industry become the exceptional and a factor in modern society? Can ethical banking be a portal for trust forces, morality and responsibility to feed money processes and the financial system with basic values and practices that can be a counter power to uncontrollable morbid growth? Trends should be defined on the basis of answers of this questions. In ethical or alternative banking is not so easy to determinate or predict the following trends. What is clearly visible is ethics are now more than ever a subject of personal choice, behaviour and responsibility. At the same time, more and more people are individually looking for values to incorporate in daily life. As contemporaries on their way, they are part of an ongoing process of search and practice linking up and networking with other people, creating new forms of social cohesion. Instruments such as ethical processes, products and services and money as a subservient tool can be helpful.

CONCLUSION

An ethical banks, also known as a social, alternative or sustainable banks are concerned with the social and environmental impacts of its investments and loans. The ethical banking movement includes: ethical investment, impact investment, socially responsible investments and is also related to such movements as social entreprises.

In general all banks has an intermediary role in the economy, because of this the possibility for banks to contribute to sustainable development is potentially profound. (Jeucken, 2002) Ethical banking is considered one of several forms of alternative banking. Numerous ethical banks (as well as some conventional banks) allow customers to contribute to organisations that have positive societal/environmental impacts either in the local community or in developing countries. Example include an evaluation of the energy efficiency of a home and potential improvements in this, carbon offsets, credit cards that benefit charities or lower interest rate loans for low emission cars.
When the weaknesses of banking were analysed, it was determined that banks were more constrained by legacy systems than fintech firms, stifling innovation and the ability to be agile. Banking was also hampered by the inability to recruit the level of technological expertise needed to improve products compared to fintech entrepresis. Because of there complementary needs, the number one prediction for 2016 by far:

“The most significant trend of 2016 will be the “platformification” of banking, where both existing banks and startups begin a strategic shift towards becoming banking platforms, much like how Amazon is a platform in retail.” (Ron Shevlin, Smarter Bank).

References


Charity Bank [online] [Retrieved 13.02.2016 at https://charitybank.org/ethical-bank]

Co-operative bank [online] [Retrieved 13.02.2016 at http://www.co-operativebank.co.uk/products?int_cmp=topnav_our-products_allproducts]


Smith, A. (1759) The Theory of Moral Sentiments


Brands, net disposable income and consumer behavior of Slovaks

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Abstract
Consumer behavior is a crucial issue which takes place in many studies connected with brand and brand management. As it is written in many research conclusions, consumers and their behavior is not only complex but flexible phenomenon too. Net disposable income is one of the most variable factors in live of everybody. In presented article net income represents a key factor which is tested towards consumer behavior in Slovakia and finally interpretations are formulated. According to representative research conducted in 2013 it is possible to identify positive connection between net disposable income and 4 from 27 tested statements. The statements are connected to the importance to buy Slovak products, willingness to look for country of origin of product and in case of food products Slovaks are buying mostly Slovak products. The last statement that Slovak consumer do not know about country of origin of favorite product indicate on the other hand complexity of the tested issue of consumer behavior.

Key words: consumer behavior, segmentation, brand, marketing, disposable income

JEL classification: M31

Introduction
Consumer behavior is a very complex issue and too important for business success of companies to be left only for the self-development. According to the dictionary of American Marketing Association (2016), consumer behavior can be characterized in 3 points of view: First as the dynamic interaction of affect and cognition, behavior, and the environment by which human beings conduct the exchange aspects of their lives. Second as the overt actions of consumers. And finally third point is, that the behavior of the consumer or decision maker in the market place of products and services. It is often used to describe the interdisciplinary field of scientific study that attempts to understand and describe such behavior. What is still interesting on consumer behavior, that individuals can affect not only themselves, but families, groups, society as a whole and of course company producing favorite products and its competitors. According to Solomon (2013, p. 31) consumer behavior is a process when people select, purchase, use or dispose of a product, services, ideas or experiences to satisfy needs and desires. And therefore many researchers are trying to understand reasons and motivators which lead consumers to the actual decisions.

Theoretical foundation of consumer behavior
One way how to influence decision of consumers is to build loyalty. When consumer prefers product with the exact characteristic, usually one of them is a brand. As Calkins (2005) wrote, brand is a set of associations linked to a name, mark, or symbol associated with a product or service. But brands are not always a positive, associations can be positive or negative too. Generally brands have a considerable ability to impact consumer attitudes towards products. Therefore marketers are interested in creating of the brand loyalty. This term can be defined according to American Marketing Association (2016), as the situation in which a consumer...
generally buys the same manufacturer-originated product or service repeatedly over time rather than buying from multiple suppliers within the category, or the degree to which a consumer consistently purchases the same brand within a product class. As Aaker (1996) stated, brand loyalty is a key consideration when placing a value on a brand that is to be bought or sold, because a highly loyal consumer base can be expected to generate a very predictable sales and profit stream and brand without a loyal consumer base usually is vulnerable or has value only in its potential to create loyal consumers. And on the other hand loyal consumer also represents a substantial entry barrier to competitors. What can be a significant advantage in today’s hostile market competition.

Therefore in the marketer’s effort take a central position branding of products. Interesting is an idea by McEwen (2005), who metaphorically named consumer relationship to a brand as a marriage to the brand. He wrote, that true brand greatness is reflected in the number of strong brand marriages, not just in the number of prospects who are aware of the brand or who may have been enticed into a single first-date experience. Of course in the global entrepreneurship and global brands is situation much more complicated, because of the uncertainty in the marketing environment, as stated Chan et al. (2013).

The research methodology
For describing the role of net disposable income in Slovak consumer behavior toward brands was used comparison method. Theoretical background and knowledge was confronted with analyzed data collected from primary research conducted from January to April 2013 in Slovak Republic in different regions of the country. Interviewing was used as the method and questionnaire as the instrument in which was formulated 3 open questions concerning brand recognition, where the spontaneous knowledge of Slovak and foreign brands was tested. After that, 27 statements in form of Likert scales were asked. Statements tested respondent’s attitudes toward brand and price, country of origin, ability to deal with information and the quality of product. The scales ranges from 5 stages – absolutely disagree, disagree, do not know, agree and absolutely agree. Into research were involved more than 1200 respondents. Into statistical analysis were taken 1067 correctly answered questionnaires. This research was representative because the quota sampling was used and it covered proportionally subgroups relevant to the Slovak population in terms of age, income, gender and education. Income group was categorized into 8 groups from below 331€ to over 2661€.

The data were statistically evaluated in software Statgraphics, which allows to prepared graphical and numerical outputs. Results of chi-square in the tab. 1 were calculated in Statgraphics. As the statistical method was chosen chi-square test which allowed testing of factor – net disposable income on 6 selected statements. The exact p-Value is compared to the critical value of 5% and then the null hypothesis on independence of statements and factor can be rejected or not rejected.

Research results
Research efforts were oriented for identifying whether net disposable income is the relevant factor for effecting consumer behavior. Firstly 6 statements of 27 were selected for answering research questions:

1. Is net income relevant factor when it comes to buying of Slovak products?
2. Is net income relevant factor when it comes to willingness for searching information where the product was made.
3. Is net income relevant factor when it comes to origin of 3 product categories: footwear and textiles, consumer goods and food?
4. Is net income relevant factor when it comes to knowledge whether favorite brands are Slovak or foreign?

As statistics shows net disposable income is a very relevant factor for buying Slovak products in general. For Slovak consumers is net income influencing factor in connection with statement “It is important for me to buy Slovak products.” Namely it is possible to define, that with income grows the importance for supporting of Slovak products. But from the second highest income category of 2321€ relevant for 7% of respondents, orientation on local product is declining. Willingness for gathering information where the product was made is also positively taught by net income. Results can be interpreted, that generally with income rise the willingness. But except of the lowest income category below 331€ which is oriented more on delivering of information (7% of respondents). And from the income category of 1991€ is orientation on information about country of origin falling down (11 % of respondents).

Behavior to the origin in product categories footwear, textiles and consumer goods is not affected by net income of household. But in case of food products it is quite the opposite. Statistics shows that with higher income, importance to buy Slovak food rises. Expect of the lowest income category as in previous case, when consumer is oriented more on Slovak food. Interesting is, that from the income of 2321€ is orientation on buying Slovak food weaker.

Testing category cognition of favorite brand origin is affected by net income. Consumer recognition of origin is more characteristic for high income segments. It can be stated, that higher income supports the concept of country of origin.

Tab. 1: Net disposable income as a factor influencing Slovak consumer

<table>
<thead>
<tr>
<th>Factors</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important for me to buy Slovak products.</td>
<td>54,33</td>
<td>36</td>
<td>0.0255</td>
</tr>
<tr>
<td>I am willing to look at the information where the product was made.</td>
<td>51,58</td>
<td>36</td>
<td>0.0446</td>
</tr>
<tr>
<td>In footwear and textiles I prefer foreign brands.</td>
<td>42,67</td>
<td>36</td>
<td>0.2061</td>
</tr>
<tr>
<td>In consumer goods I prefer foreign brands.</td>
<td>39,27</td>
<td>36</td>
<td>0.3255</td>
</tr>
<tr>
<td>I mainly buy food made in Slovakia.</td>
<td>54,86</td>
<td>36</td>
<td>0.0229</td>
</tr>
<tr>
<td>I do not know whether my favorite brands are Slovak or foreign.</td>
<td>51,72</td>
<td>36</td>
<td>0.0435</td>
</tr>
</tbody>
</table>

Source: Own research

**Conclusion**

Slovak consumers can be generally characterized as income affected. Usually with income comes also the importance to support Slovak products and to watch origin of product. But marginal segments of net income consumers tend to behave differently. For example low income consumers are oriented more on information searching and on the other hand, above-average earnings are less oriented on support of Slovak products and they are less willing to read information on packaging. As interesting we can find that footwear, textiles and consumer goods are categories which are not affecting by consumer income. The reason can be understand in different ways: after transition from the centrally planned economy to the market economy is not as easy to find locally produced goods in each product categories and when it is, foreign products are more in price – competitive.
Absolutely different it is in food products, when higher income support buying of local food. Also here is visible low income segment, which tends to buy more Slovak food. Reasons why, can be different. As possible, low income can means, that people come from villages and economically less developed regions. People living in those areas recognize the need to support local products and are probably closer to farmers selling food directly. Of course it can be also young people without regular income supported by their parents. In the other way high income consumers behave less sensitive to support of Slovak food. Probably they prefer the highest quality and brands without limits of products origin.

For supporting of Slovak brands and goods is probably relevant finding, that recognition of product origin is more characteristic for high income segments. This can be useful for marketing communication of Slovak products. We would suggest communicate with consumers in different ways. As results shows, the mainstream segment of consumers is affected by income, but economic growth will probably change consumer behavior. With declining inflation, economic growth and employment will increase income. Slovak companies, supply channels and many programs on support of local products should communicate the reason why consumers should behave more “clever” ethnocentric. Probably Slovak products are worth to be communicated more as high quality products with competitive values and supporting rational ideas of clever and on-values oriented consumer. And not only as product that we must encourage for “passive” ethnocentrism coming from proudness on it and traditions. Certainly product categories can be found that can be communicate more rationally and with pride to their origin.

Acknowledgement
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References

AMA. (2016), [Online], [Retrieved April 22, 2016].


Hlášna, S. and Horváth, M. (2012). Komponenty kvality života detí, mládeže a dospelých v educačných a právnych aspektech BPS Ekselect DOO, Báčsky Petrovec


Technological development within the ITC-sector and resultant changes of behavior of its users

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Abstract
Two inventions have revolutionized the office world: the invention of the telephone and the invention of the computer/PC. The triumphal procession has started with the mass production of micro-processors end of the 1970ies. Wire line and wireless world started in the 1980ies to grow together. This process was accompanied by a very fast development of different types of software: Operating systems to make the devices run and application software for the users for any kind of usage within the offices and away on business. The globalization is based on three facts – opened borders, complete changes at logistics and the development of ITC. The world has shrunk to a global village by these facts. Global Players have divided the world into sub-regions, have installed local competence centers and started various kinds of fusions, relocations and outsourcing. Resultant of technical development by ITC was raising efficiency by reduction of space and time and worldwide installed facilities for R&D and production.
The geographical location in the world became less important that opportunities to make business. English language became often company language followed by western norms of behavior regarding political correctness. All these facts generated a significant change within the world of work. It has established the change from the society of manufacturing to the society of information and knowledge. The volume of available information started to double each two years. The information overload was beside the challenge of personal availability 24x7 the biggest issue for many employees around the globe.

Keywords: Information technology/telecommunication (ITC), behavior of users

JEL Classification: J0

Introduction
Two inventions have revolutionized the office world: the invention of the telephone and the invention of the computer/PC. The triumphal procession has started with the mass production of micro-processors end of the 1970ies. Parallel started a revolution with portable phones and computers in the late 1980ies. Wire line and wireless world started to grow together. This process was accompanied by a very fast development of different types of software: Operating systems to make the devices run and application software for the users for any kind of usage within the offices and away on business.

This paper describes the development of the information technology (IT) and the telecommunication (TC) development to the ITC-world from the technical point of view. The study concentrates on technical preconditions as well on subsequent results for the users. These results will be theoretically worked out on the existing scientific literature and on the other hand they generate the basis for the empirical field research. The targets can be described as follows: which results have the usage of ITC-hardware and –software, are we aware of the relevant
benefits it brings its users, what would be the eventual result of not using it? And it will be investigated, if all people are aware of the results at the users.

Based on the size of the ITC-sector this research is focused on the business oriented office range. Other parts like logistics, production, R&D etc. which were also significantly affected and changed by the usage of ITC applications will be kept out to limit this research project.

Regarding the hardware this study will concentrate only on the voice transmission (telephony, wire line and wireless) as well on the data processing and transmission (computers). At the software sector there will be only a focus on applications and the attended implications.

In general it can be stated, that the development of the ITC is in this paper written from the German point of view. A comparison to other industrialized countries like the G7 (established 1975 by the 7 biggest industry nations at that time) will bring probably similar or comparable results.

**Hardware environment**

Hardware means any kind of devices of the ITC-sector, which are used in office environment. The telephone was in the 1860ies invented and started to be disseminated to users in the 1950ies, the computers started after World War II and the PC in the 1980ies. The real revolution in ITC began in the 1990ies when all of these devices began to be part of each household and be used by private persons (Schneider, V., 2001).

**Wire line hardware**

The basic idea of Telephony was to communicate via long distances with technical devices. The complete coverage of infrastructure for phones was in West Germany achieved in the 1970ies and after reunification in whole Germany in the 1990ies. Due to high costs and the limited possibility to control the users there was only in 10% of all households in East Germany a phone, so to build up the needed infrastructure took about a decade (Schneider, V., 2001), the costs were about 100 milliards DM (Deutsche Telekom, 2000). The technology was at the beginning in analog technique and was changed at the end of the 80ies in digital (in Germany ISDN). Due to digitizing signals these could be subsequently processed. This had then an impact on the data transmission rate which rose within a few years by power. To cover this data volume DSL-connections were needed (Keller, A., 2011). In the noughties (decade year 2000 following) the next technical change in transmission technique has started. It was IP-based and the voice transmission got the name Voice over Internet Protocol (VoIP). Here gets the voice digitized. The Internet Protocol combines the functions of the access to the net, the transport and the application in the classical meaning.

It has to be understood, that in highly industrialized countries the most modern communication technology is already given, but in less and least developed countries the situation is completely different (Behofsics, J., 2013).
The whole development continues in its progress and is mainly based on Moore’s law (Moore's law is the observation that the number of transistors in a dense integrated circuit doubles approximately every two years.).

In the literature are found contradictory information about the validity of Moore’s law. A final statement about the future development can therefore not be made.

**Wireless hardware**

Since the 1990ies the mobile telephone system has started its triumphal procession. While at the beginning of the 1980ties a car phone had a price of a middleclass car (16.000,-DM) and at the end of the eighties of a small car (8.000,-DM), the price for mobile phones started to fall sharply in the nineties, paid via the monthly tariff units. The radio infrastructure got built up and the accessibility over the whole country started to work. That was the beginning of the slogan of Bill Gates: anytime, anywhere, anyone, and any device (the 4 a’s). The radio infrastructure had to be permanently updated and new techniques were installed. The primarily GSM (GPRS/EDGE) was replaced by UMTS (HSPA/HSPA+) and this got replaced by LTE which is used mostly nowadays.

A consecution out of that was that sales and usage of mobile phones achieved never expected volume. In 2015 are worldwide expected about 7 milliard users which means in average about 1 per person (Homann, J., 2014). As many in underdeveloped countries have no phones it means automatically that in industrialized countries many people have 2 devices, one for private and one for business. The wireless infrastructure is not only used on the way, but also in the office or at home.

**Software environment**

Software has to be split into the operation system (e.g. Windows) and the application software (e.g. MS-Office like Word, Excel, Power-Point etc.). The software is something like the brain of the hardware. They run in a larger version on stationary computers/servers and in smaller versions (thin clients) on mobile devices (Laudon, K. C. et al, 2010). The crucial point why mainly computers and software are so successful around the globe is the standardization. Standardized software is the precondition for an unproblematic exchange of data worldwide between all users and that makes standardization so valuable. Despite the fact that Microsoft and its founder Bill Gates are not everywhere popular due to their de facto monopoly in business application software, it was a general breakthrough for computers anywhere. An example can make it clearer: MS-Word looks in all languages same and in all versions is beside the local language also English installed. That means, as English is the most common language in business world that more or less everybody can work from every business PC in the world. Also this fact had a significant impact on globalization (Buxmann, P., et al, 2014). Beside the described and well known business software other kinds of application software are used worldwide. The 2 main groups represent ERP (Enterprise Resource Planning) and CRM (Customer Relationship Management) which are mainly represented by the market leaders...
Oracle and SAP (Wirtschaftswoche, 2014). The whole software is built in a modular way so each customer can buy only those modules he needs (Laudon, K. C. et al, 2010).

**Direct and indirect implications of the ITC to the business world**

*Role of the ITC in the worldwide globalization*

The science sees 4 basic causes for enabling of the globalization: Mainly the development of ITC, the development of the whole sector of logistics, the disappearance of political frontiers and the disappearance of anti-trade law and installation of Uniform Commercial Code (globalisierung-fakten). (Comment: it was practically impossible to find neutral literature about globalization, as it was either biased “pro” (employers’ associations), or “contra” (anti-globalists)).

The becoming of trade areas, the global division of work and the worldwide networking are based on the development of the ITC. It is led by the most important industrialized countries (G7) who dominate worldwide export and import of products and services (Fuchs, M, & Apfelthaler, G., 2009). Additionally the global players have spread the world into 3 world-regions: The Americas (AME), Europe/Middle-East/Africa (EMEA) and Asia/Pacific (AP). The reasons are easier handling and similar time zones (Graumann, S. et al in Bundesministerium für Wirtschaft und Technologie, 2006). It can be describend as triade between North America, Western Europe and Asia/Pacific (Bundeszentrale f.p.B., UNCTAD, 2008). A direct consecution is the appearance of global players (Koch, E. 2014). Also fusions, acquisitions, relocations and outsourcing are impossible without an integrated ITC (Buchta, D. et al, 2009). Other results are the reduction of space and time which needs adequate behavior by its users. Based on the fact that people belong to defined generations it is not automatically said that all employees are able to handle new technologies as required (Kaiser, S. et al, 2010).

*Changes of the world of work related to the ITC*

Originally the science has defined 3 main sectors of global economy: agriculture, production and services. In the meantime a fourth sector has been added: ITC (Rüter, A. et al, 2010).

Based on these facts the exponential growth of information goes along to. Between 1800 and 1900 the volume of knowledge (here is no difference made between knowledge and information) has doubled, between 1900 and 2000 it has increased tenfold and today it doubles all 2 years (Gräf, P. et al, 2013). The main challenge for all people, not only direct users, is the information overload, which comes along side. Also if the human overload cannot be exactly defined, it is obvious (Kimble, Hildreth & Grimshaw, 1998). Nevertheless a numerical based overload was not measured as there do not exist at any kind of relevant models. It has to be added, that this empirical research is already nearly 20 years old and newer ones belonging to this topic haven’t been found. It has to be understood that this is a separate big area of science and will be deeper investigated within the scientific research, which will follow by the author in future.
In context with this goes the typical work in the office today. The results of this information overload are amongst others: longer working time (14%), lost joy in the job (12%) and again 12% realizing this problem but having no solution for it. The other 62% just accept the problem with the information overload without emotions and do (change) nothing (Mainka-Riedel, M., 2013). Employees tend on this basis to focus more on short term/urgent tasks to achieve success, than on important long term tasks (Häfner, A., 2011).

In general all employees must be “open minded” for new technical products (hardware and software) and to educate themselves. The result is a long life learning process. Many companies offer meanwhile extra-occupational off-the-job training (Koch, J. et al, 2004). Before the implementation of the ITC the world was distinct by a high steadiness. With the implementation of computers this has changed dramatically. Significant changes became part of daily business, mainly influenced by shareholders and only less by stakeholders (Ampenberger, M., 2010). Other results were the comparison of Top Management rewards, which grew massively and salaries of lower employees with low or partially even negative growth (Holtbrügge, D., 2010). This has in total disastrous consequences.

IT-projects and IT-departments are nowadays only led under the headline: how can we change something to reduce costs or increase efficiency. All IT applications have to support the business strategy to keep up in the competitive markets (Buchta, D. et al, 2009).

*Permanent enhancement of competitive constraints*

Since years grows the online trade (based on ITC) with a double digit increase on the account of retail markets. This trend will continue as well in future. Especially the younger generation uses this new channel of commerce for granted. The main challenge is that potential customers use the guidance in the shop for free and buy then cheaper via online. A possible solution to come out of this difficult situation can become in this regard the cross-channel-effect.

In the (seldom) case, that prices are about similar, potential customers can inform themselves about the products at home via internet and can then buy in the retail markets, if they want to see and try the product in reality before buying (“the look or touch and feel experience”) (Diehl, S., 2013). In the globalized world of today play fusions, acquisitions or outsourcing a bigger and bigger role. The result is a process of crowding out of local market leaders like the retail trade who loose against global players. The consequences are reductions of jobs.

In this context has to be stated, that also highly educated employees can lose their job (academic labor) based on the implementation of ITC. A good example regarding this matter is the financial sector. The traditional business at the counter in numerous bank branches has moved often to online banking. The result was the loss of thousands of specialists within the banking sector (Häcker, J., 2014). And even at stock exchanges lose top qualified specialists their jobs due to the usage of ITC. High-Frequency Trading (HFT) is faster and better than any human being can ever be and has superseded many top paid specialists in the brokerage world around the globe, also called Algo-Trader. It works as follows: high amounts of money are used to buy
and sell via seconds to capitalize on very small price differences of shares on every description. Breakdowns within the ITC create massive losses at the affected stock exchange (Book, T., 2013).

This development shows that computers could take over in the near future many existing jobs. Forecasts suspect that 18m of 31m employees in Germany could get replaced by a machine or a computer in the nearer time. Massive differences are given by the various kind of jobs based on specialization, management level and job sector. And this is not less than a revolution in the labor market, as up to now mainly low or unskilled employees were replaced by machines, but in future nearly everybody can be affected by this trend. Of course this will not happen overnight, but it will be a creeping process, happening step by step (Koch, E. 2014).

The ITC is part of the third industrial revolution and the precondition for the coming fourth industrial revolution.

Many studies prove that significant gains in efficiency are based on the intense usage of ITC. The life cycle e.g. of processors has got reduced from about 2 years in the eighties to 6 months nowadays and Harley Davidson could enhance its efficiency by 97% (Römer, M., 1997 and 2014).

This development has a direct impact on daily work. The work tasks rise in their complexity. This has a strong impact on permanent changes, moral concepts and the approach to career and technology. As the flow of information cannot be controlled due to emails and internet, the control about the level of knowledge and information has been more or less lost completely. Significant changes do not happen any more step by step as in earlier ages, but parallel. The more complex a problem or organization gets the higher is the combination of possibilities (Bandte, H., 2007). A permanent enhancement of improved performance and the pressure to succeed are a direct consequence out of it. This has implicated to use the system “Management by Objectives” but it has to be realized, that objectives cannot grow permanently as markets are limited and not all of objectives can be quantified (Koch, E., 2014). Beside the pressure which these objectives generate there exist 2 other factors which have a significant impact: frequent interruptions of the work and the necessity of doing different work parallel, so called multi-tasking. Especially multi-tasking seems to be very common in many offices, but the result seems to be very doubtful. A new empirical study proves that the benefit is questionable as it limits the quality of work and reduces error detection and correction (Baethge, A., 2013).

Permanent accessibility in companies

Until the mid of eighties there was a strict separation between business and private life. This fact was based on the state of the art, that there were no mobile phones, no PCs, no Email and no internet. Today many people have to work even hours after the official end of their work checking emails or creating a presentation. This fact is described as a disappearance of time-based delimitation (Becker, P. R., 2012). The reason is an overcrowding of daily work which many employees are obviously unable to fulfill within the regular office time. More and more has to be done in a shorter and shorter time whereas the requirements rise permanently (Holler, M. 2012). Business and private life or free time start to merge together and this ends not in the
aspired Work-Life-Balance but in so called Work-Life-Blending (Holtbrügge, D., 2010). Some companies try to solve this challenge by offering a flexible annual working time, long term time accounts, sabbaticals and others. Worse is the situation for freelancers who need several jobs to survive (double or multiple jobbers, partially called “Capuccinoworkers”). The result is called in USA “Working Poor” (Kaiser, S. et al, 2010). They have a permanent risk of poverty.

To evaluate the situation from the employee’s point of view is of vital importance if the employer is in a stable or unstable situation. In an unstable company has the highest priority to protect the own job, in a stable company it is to be proactive (Bandte, H., 2015).

Permanent enhancement of individual check ability

The technology of today offers numerous possibilities to control its own employees. This works via using so called keylogger as well as mousetracking or other types of software. It is not allowed to misuse the strong position of the employer (data privacy) (§ 28 BDSG), but he is allowed to collect data which are important to evaluate the employee in general (Frese, M. et al, 2013). Due to legal basis it is much easier to control employees in USA than in Germany (Lang, P., 2013). The permanent accessibility of the field crew is a major problem for those employees. Due to the use of mobile phones and GPS-tracking of their company cars these people get very often or permanently controlled as they cannot be controlled by an internal time card. A total monitoring would exist, if even rest periods or driving style would get controlled, what is simply technically feasibly but difficult provable. In general it is a grave intervention into the personal rights of the employee (Holtbrügge, D., 2010).

Summary

This paper describes the technical revolution in the office world done by the invention of the computer/PC (IT) and the telephone (TC) to the new key sector Information Technology and Telecommunication called ITC.

This technology has brought people around the globe together as they have no difficulties to communicate with each other. Due to permanent price reductions, enhancement in performance and worldwide accessibility the slogan of Bill Gates: “anytime, anywhere, anyone and any device” is valid. The software makes the devices run and offers various kinds of applications. The ITC plays a crucial role within the globalization as it is the basis for the exchange of any kind of information and the transmission of data and money. This leads to a permanent increase of workload which was proven in empirical studies. Another result is the worldwide comparability between salaries of “normal” employees, which remained static e.g. in Germany in comparison with the income of the top management which has multiplied within the last decades. The usage of the ITC has also a major impact on competitive constraints and the use of distribution channels. The trend to buy via online has destroyed already many retail shops. And it has a significant influence also on jobs for high qualified employees. Many of these jobs were in the last years cut, even in top positions using high specialized software or hardware devices to replace human capital. And there is another result of the so called fourth revolution: the necessity of the employees to be multi-tasking due to permanent increase of the work load. This work load is also based on the often expected permanent accessibility. Many bosses expect from their salaried employees to be accessible 24x7, no matter if it is late evening, weekend or
vacation. The other side is the working poor or McJobber called, who need several poor paid jobs just to survive. The last technical result of the ITC is the individual check ability. Employees can be via different legal or illegal software controlled by its employers which makes any kind of behavior transparent.

**Planned research study**

Based on the permanent and massive developments within the ITC-sector an empirical field study is planned to find out which concrete results the usage of the ITC really has. The consequences for the employees as well as for the employers will get investigated. Positive and negative results will be elaborated. A focus will not only be done on the directly affected business life, but also on private life including body related results like burn out and deceases.

**References**


Dt. Institut für Künstliche Intelligenz (2011), die 4. industrielle Revolution; published in the Internet by: Das Technologie-Netzwerk, Industrie 4.0 Evolution statt Revolution

Dt. Institut für Urbanistik (2003), DIFU-Berichte 1/2003 veröffentlicht im Internet: Nutzungswandel und städtebauliche Steuerung


Globalisierungs-fakten.de, recalled data from Internet, (01.03.2016)


Römer, Marc (1997): Strategisches IT-Management in internationalen Unternehmungen, 1. Auflage, Springer Wiesbaden (statements are used also in many later publications by himself as well as others)


Wirtschaftswoche: „Wir wollen SAP überholen“ (18.10.2014)
Abstract

Islamic Banking is recognized as way of financial engineering, which comply with the rules and merit of the Islamic religion mainly defined by the Sharia. Due to the fact that in recent years the Muslim orientated population increased steadily with a high affinity towards entrepreneurship, the demand towards Muslimism orientated banking products increased accordingly. This paper concentrates on a content analysis method to compare the two different banking philosophies between an Islamic Bank and a traditional capitalized banking approach in Germany. The objective of the analysis is to evaluate whether the Islamic financial idea based on the Sharia complies with the German financial regulations based on different trade and banking laws. The focus of the analysis is to give an idea of the possibilities and further questions to allow an Islamic friendly funding for enterprises, handling of the interest proscription as well as how to deal with financial accounting standards and property rights. The results of the preliminary research indicate that an Islamic friendly banking approach complies with Germany banking standards and regulations. The analysis demonstrates also the need for political actions and adjustments of the current financial legislation. The trade of estate property as a substitute in order to comply with the interest ban causes of the German legislation various problems in the definition of the real transfer of ownership, the definition of its value as well as the reporting of profits of the bank. Despite those identified problem areas the comparison of ethical issues indicates various starting points to rethink our financial engineering system also with the objective to support entrepreneurship in Germany.

Key words: islam, banking, Germany

JEL classification:

Introduction

In about 75 countries of the world Islamic banking is in operation and it is expected that the global market share of Islamic banking grows up to 20% worldwide by 2025. According to the institute of Islamic Banking in 2015, it is expected that within the next 5 years up to 1 Million employees with Islamic banking knowledge are required worldwide (news monitor, Journal of Islamic banking March 2015, Catovic 2014). Research of the performance varies, however the results indicate that the profitability appears to be lower on Islamic banks, but the solvency and stability of the banks is regarded generally as good (e.g. Tariy, Tahir, Momeneen 2012 Zeb 2015). Great Britain was one of the first European Countries how introduced an Islamic Friendly Bank in their financial engineering landscape. Following these experiences also in Germany the Turkish Bank “Küveyt Türk Bank” became in June 2015 a fully accepted bank licence. In Europe, Islamic bank is noticing a fast development with annual growth rates between 10 – 15%. The reasons have to be found in the increasing number of Muslim migrants
who have a strong affection towards entrepreneurship. As a consequence, it appears not surprising that they prefer financial products in accordance with the faith and values of the Muslim population (Abduh, Ramjaun 2015). But also a Non-Muslim entrepreneurs increased their attention towards ethical based financial services since the financial crisis in 2009 (Wentler, 2012). In analyzing the GEM Global Entrepreneurship monitor it can be suggested a relationship between the fast growing efficiency-driven economies, the high entrepreneurial intensity and the provision of Islamic banking services (see table 1). The entrepreneurial intensity in innovation-driven countries is lower than in efficiency-driven economies which can not only be a result of the individual national economic climate. In the case of Germany, the entrepreneurial situation is problematic due to a very low entrepreneurial intensity. Thereby one needs further to encounter that 30% of all business starters do have a Muslim background. Although the Germans have a good network of counseling services and public support schemes, financing an entrepreneurial venture is still a major problem in comparison to other innovative driven countries in Europe (see GEM Entrepreneurship Monitor 2014).

Hence this paper tries to answer the question, which elements of Islamic banking match closer to the problems of promoting entrepreneurship. Moreover, it is of interest whether there are elements in the Islamic banking approach which can be adopted by the conventional banking system. In analysing the idea and approach of Islamic banking it is the objective to get new insights in the provision of financial instruments to entrepreneurs in order to alter the relationship between an entrepreneur and his bank. Finally also the compliance of an Islamic banking approach within a Christian based social, financial and fiscal system appears to be of interest.

### Understanding Islamic Banking

Interest (Riba) is one of the driving forces and key element in conventional banking, this element is strictly forbidden in Islamic banking. The Islam presents itself as a complete code of life and is laid down in a set of rules in order to give some guidance for the social, political and economic life. Thereby the methodologies in applying the Islamic faith are laid down by the Shariah, which also provides the solutions to the management of financial affairs (see figure 2). According to the ethic board, financial transactions have to be in line with the principals of the sharia which are defined as Haram (forbidden) and Halal (allowed) in order to become a viable economically and ethically business transaction. Beside the interest ban, these transactions must follow the following principles (Minhas 2015, Zaman, 2014, Geilfuß 2009):

1. Risk sharing: both parties which are involved in the financial transaction must share the risk of loss.
2. Materiality: every financial transaction must be linked with a real economic transaction
3. No exploitation: financial transaction must create a mutual benefit
4. Business activity must be Halal or Haram. Forbidden are business transactions, including alcohol, pork meat, weapons etc.

The principal operation of an Islamic bank is based according to the regulations to barter businesses. This means that the profitability arises of trade profits (buying and selling commodities with profit). These profits are in line with the Shariah. Nevertheless, due to the use to
the trade model, Islamic banking is highly depended to the saving motivation of its own population. In order to operate these trade bargains, there are 4 different options possible (see Schulze 2012), which can be briefly outlined as follows:

**Table 1: Financial Types of Islamic Banking**

<table>
<thead>
<tr>
<th>Financial Type</th>
<th>Content/ Equivalent to Conventional banking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Murabaha</strong></td>
<td>This is the typical model for estate properties. The bank buys the property and sells it back to the buyer incl. a profit margin. The buyer is allowed to pay the price by instalments.</td>
</tr>
<tr>
<td><strong>Musharaka</strong></td>
<td>This model is a joint venture based model. Both parties form an own cooperation and the rent or leasing instalments are paid by the profit out of the venture. Beforehand also here is a fixed price agreed and both parties need to provide equity funding.</td>
</tr>
<tr>
<td><strong>Istisna</strong></td>
<td>Project funding for development projects. Here a fixed price and instalment funding is agreed, although the work in progress of the real economic good is still in operation.</td>
</tr>
<tr>
<td><strong>Ijara</strong></td>
<td>The model is comparable with a leasing option. The transfer of ownership of the equity will be performed with the payment of the last instalment.</td>
</tr>
</tbody>
</table>

**Methodology**

Research on entrepreneurship suggest that obtaining funding for a business idea is the appraisal of risk and risk sharing, the quality of the interaction between the bank and the entrepreneur on the basis of the presented ideas decides on the likelihood of obtaining finance. However, also the cost of finances appears to be of interest, which are demonstrated by its capital costs and perhaps additional costs in order to alter Islamic banking methods into the German legal and fiscal system (Sadoveanu 2011). The basic approach used in this paper is a qualitative factor analysis approach. On the basis of the existing literature and discussions, the Islamic banking idea will be compared with the existing conventional banking system in Germany. The analysis has been guided by the key problem areas and performed by a conceptual analysis. Thereby the idea was to define preliminary elements for a more in-depth research in order to alter financial products for the promotion of entrepreneurship.

**Results of the content analysis**

In the following section, the presentation is guided by a direct comparison of conceptional issues between the Islamic and the conventional banking approach with particular reference to the German situation. The first results can be outlined as follows:
General Performance:
The differences in the general performance and approach can be outlined as follows:

<table>
<thead>
<tr>
<th>Islamic Banking</th>
<th>Conventional Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits by trade bargains and Commission fees</td>
<td>Profits by interest rates and banking fees</td>
</tr>
<tr>
<td>Profit maximization and promoting common welfare/wealth</td>
<td>Profit maximisation and promoting individual welfare/wealth</td>
</tr>
<tr>
<td>Collective Interest dominates the decision making process</td>
<td>Individual Interest dominates the decision making process</td>
</tr>
<tr>
<td>Interest Ban: Overdrafts: Penalty, Deposits: Gifts</td>
<td>Business Model is based on interest. Interest is the price of money as a commodity</td>
</tr>
<tr>
<td>Decisions are guided by the religion</td>
<td>Decisions are separated from any religion</td>
</tr>
<tr>
<td>Money as mean of a barter business</td>
<td>Money as an own commodity.</td>
</tr>
</tbody>
</table>

In general, it appears that the decision making process is guided differently and more ruled by overall ethic values and not singular guided by interest and individual risk appraisal. Nevertheless, the cost of financing is also more clearly defined by the barter approach and the fixed end prices in order to comply with the interest ban. However, this approach leaves a lot of individual freedom in the appraisal of risk and participation of market opportunities. This issue makes it certainly difficult in order to evaluate the offer of an Islamic bank.

Risk sharing
According to the Islamic banking regulations, risks need to be shared as well as it losses. This means in particular that in case of a loss only the open amount needs to be shared. Shares which have been paid by the entrepreneur to the bank or equity by the entrepreneur and do not serve as collaterals for the creditors. The treatment of risk appears to be one major distinctive factor between both banking systems (Abidemi, Foudalmoula 2015). However, also the facts that both parties share the risk and to take securities is not allowed for an Islamic bank, also the cost of finances are higher (Wurst, 2013). Nevertheless since the risk needs to be encountered in the trade model without securities, the bank needs a good risk appraisal system and the cost for the entrepreneur could be higher in order to pay the willingness by the bank to enter a joint business venture.

Interaction
According to the barter approach, the bank and the entrepreneur interact of a peer level due to the idea of a business partner. Moreover, the required closed interaction between the bank and the entrepreneur is a depended variable towards success and failure. This means also that an
Islamic bank needs to deal with a principal-agent-problem. In the conventional banking approach exists a more hierarchical interaction which appears to be also a factor in the complicated communication between both parties. Former experiences as well as the completions of formal duties (e.g. Basel III-IV) are regulating the quality of interaction and communication.

Compatibility of Islamic Banking
In this section the particular German situation needs to be considers. First of all estate transactions are subject to a real estate transfer tax which would apply in the case of Islamic banking twice. Secondly, the joint ownership of the commodities raises a lot of accounting and taxation problems as for example the appraisal of depreciation and maintenance costs. Secondly, also in the case of vendering a commodity within the agreed financial period may be problematic as it is unclear the timing of the realization of profit for taxation purposes. Furthermore, there a number of marketing problems, as many regulations and laws are based on the treatment of interest which is implicit integrated in an Islamic banking deal (Geilfuß 2009, Käseberg 2012)

Conclusions
The main difference in the approach of Islamic banking with respect to entrepreneurship is the treatment of risk and the distribution of income and equity. This applies directly to the perceived fear of failure in order to take up an entrepreneurial venture. In future entrepreneurial research is should be more quantified, whether his approach would influence more an entrepreneurial decision was also in Germany other models as business angels, equity funding etc. entering the market. Otherwise, it appears to be that within the Islamic banking system a lot of effort is made to comply with the interest ban by using the trade model. Also in this case there are more investigations are needed to compare both systems in order to evaluate the cost of both systems by considering the risk and fiscal costs.

References
Käseberg, Patrick: Islamic Banking, Evaluierung der Tauglichkeit für den deutschen Markt, Diplomaica Verlag GmbH, Hamburg 2013
Singer, Slavica; Amoros, Jose Ernesto; Moska, Daniel: GEM Global Monitor 2014, General Entrepreneurship Monitor
Wentler, Chantal: Islamic Banking- Ein aufsteigendes Geschäftsmodell?, Diplomaica Verlag, Hamburg 2012
Abduh, Muhamand; Ramjaun, Shaheen: The Role of Region in Islamic Bank Patronising Behaviour: A Survey in Mauritius, Journal of Islamic Banking and Finance March 2015, pp. 70 – 76
Minhas, Imaran Hussain: Insights on Islamic Finance, Part 2 Journal of Islamic Banking and Finance March 2015, pp. 75 – 79

Schulze, Elke: Murabaha, Mudaraba, Itjara, Islamkonforme Kreditvergabe, Immobilienwirtschaft 07-08, 2012, pp. 30-32


Zerth, Martin, Kiepe, Marcel, Mittendorf, Andrea: Islamic Banking, das Potenzial ist begrenzt, Mittelstandsnachrichten 08/14, pp. 18-22


Sadoveanu, Diana: Islamic Banking in European Union Countries: Challenges and Opportunities, CES Working Papers III(4), 2011

PREDICTIVE ANALYTICS AS A PART OF BUSINESS DEVELOPMENT

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Abstract
Companies are faced with more and more data. These are collected by there own or externally available data sets, time series and information. Most of these data are unstructured and have different types and formats. Last years IT-experts are talking about „Big Data“ as a big issue to handle these data and take an advantage out of them. Predictive Analytics is the most exiting part of „Big Data“. By using the unmanageable sum of historic and new data, stochastic algorithms are able to recognize patterns and transform them into future probabilities and forecasts about events and outcomes. The value of forecasts is very differently and regarding to the business model of the companies and the relevant time horizon for reactions. A lot of companies over all branches have the opportunity to enrich there value chain with completely new products and services based on a deeper knowledge of there customer and their markets by using Predictive Analytics. The defiance for all companies will be to find out what will be a value for their customers, what kind of data do they have and how to transform an idea into an autonomous acting system. With our publication we want to show the need and the opportunities to use Predictive Analytics in companies and make Business Development departments sensitive about it to generate new revenues and new services. Predictive Analytics is part of economic research and needs a overall understanding of business.

Keywords: Predictive Analytics, Business intelligence, Big Data, forecasting, business development, software

JEL Classification: M15

Introduction
Aim of our paper is to work out corporate situations and criteria in which Predictive Analytics may generate a value. We worked in different projects for different companies and here will define suitable criteria for a successful use of Predictive Analytics. We will show how a project may be planned and realized.

Most of you remember the movie „Minority Report“ in which Tom Cruise acts as a police officer in the year 2054. At this time crime will be recognized before it happens. A system called „precime“ will know what you will do, before you do by using three visionary guys the so called “pre-cogs”, which are blessed which the skill to dream of the next murder (IMDB, 2002). In the year 2015 the german author Sebastian Fitzek succeded with the book „Das Joshua
“Profil” in which a software based on artificial intelligence forecasts crime by using all public and private data available. By profiling every single person it will find out the probability to individually act as a thief, a raper or a murder (Fitzek, 2015).

There is software like this and there are public authorities using it. The difference is, they are not (yet) using private data or making individual profiles, but they are yet making probabilities to forecast in which neighborhoods something can happen to send out more police officer to prevent. Police authorities are using software developed by specialized companies like “PreCobs” and “PredPol”. This software will be stocked with historical information about local crimes. To make prediction possible, they then integrate future information about weather and events like vacations or sports. Now it’s possible to look for patterns and probabilities about crime in the near future. Goal is not to forecast exactly a special crime. Goal is only to make the best out of the given resources like police officer and patrol cars. When police knows a neighborhood with the highest probability for burglary, they can send one more patrol car than at average risky times (PredPol, 2016).

But we are not talking about governmental use or law enforcement. We will talk about the value of forecasts in an uncertain world and the role predictive analytics can play in companies and how to develop new ideas in context Predictive Analytics. As a matter of fact most companies don’t like uncertainties. An uncertainty can be, to don’t know what a customer want to buy on a webshop, or which price he can or wants to pay for a product? What will be the price of a share tomorrow? How many insured claims will occur next month? How many electricity will be produced by wind engines in the next hour? How many people will buy fresh sushi in a supermarket tomorrow? There are a lot of questions like this. The biggest challenge for companies will be to find out how Predictive Analytics can help to provide new service or products. In our opinion these ideas will not be generated in the IT-departments of the companies, they have to be generated in the Business Development or at a high level of management. The technologies behind Predictive Analytics like stochastics and Artificial Intelligence might be complex, but they are to handle. More important is the understanding of the whole entire business chain.

**Predictive Analytics**

As a fact, every single day in 2014, more than 2.5 quintillion bytes of data are created by companies and private, with 90 percent of the world’s data created only in the past two years alone. Videos, pictures, feeds, blogs, messages, machine data (sensor information) and other types of structured and unstructured data appear every day. The global production of this data will be 44 times greater in 2020 than in 2009 (Sashihara, 2012). The volume of business data worldwide is expected to double every 1.2 years. Why do companies collect them? Why not delete? Is there a worth in historical data?

The retailer Wal-Mart processes one million customer transactions per hour, which are stored in databases estimated to contain more than 2.5 petabytes. There are questions regarding to these enormous set of data: What is the value of them? What can Wal-Mart do to understand
customers better and make an advantage? Are there important patterns like the „pregnancy-case“ in which a u.s. based supermarket found out what pregnant women buy in the first days and than proposes medicine and products for them? Target noticed that women on the baby registry were buying larger quantities of unscented lotion around the beginning of their second trimester (Hill, 2012).

While computing resources have evolved, advancing to better handle data size and complexity, more and more companies harvest many more benefits from Big Data and Predictive Analytics. It’s no wonder that big data is a topic in corporate boardrooms and IT departments, with many leading firms doing more than talking. According to recent studies, more than 45 percent of u.s. companies have implemented a business-intelligence or Big Data initiative in the past two years. Further studies estimate more than 90 percent of Fortune 500 companies will have at least one big data initiative underway within a year (Scharlach, 2013). The effective use of this technology can deliver substantial innovations in service and products. Building capabilities in this area will not only improve performance in traditional segments and functions, but also create opportunities to expand product and service offerings.

Big Data is a collection of data sets that are so large and complex that they become awkward to work with using traditional database management tools. The volume, variety and velocity of big data have introduced challenges across the board for capture, storage, search, sharing, analysis, and visualization. Examples of big data sources include web logs, RFID, sensor data, social networks, internet search indexing, call detail records, military surveillance, and complex data in astronomic, biogeochemical, genomics, and atmospheric sciences. Big Data is the core of most Predictive Analytic services offered by IT organizations. Thanks to technological advances in computer hardware and new databases such as Hadoop, MapReduce, and in-database and text analytics for processing big data questions. It is now feasible to collect, analyze, and mine massive amounts of structured and unstructured data for new insights (White, 2009).

The central element of Predictive Analytics is the predictor, a mathematical variable that can be measured for an individual or other entity to predict future behavior at a high level of granularity. For example, an insurance company is likely to take into account potential driving safety predictors such as age, gender, and driving record when issuing car insurance policies. Multiple predictors are combined into a predictive model, which, when subjected to analysis, can be used to forecast future probabilities with an acceptable level of reliability. In predictive modeling, data is collected, a statistical model is formulated, predictions are made and the model is validated (or revised) as additional data becomes available. Modern software systems are using the potential of advanced artificial intelligence like „neural networks“, „support vector machines“ or „Bayes Networks“. Most advanced systems like MRI META-AI integrates more than one artificial intelligence and make them work automatically to generate forecasting models in every field of business or science imaginable. In many cases the technologies of the predictor are based on these artificial intelligence to handle the enormous numbers of data. Predictive Analytics encompasses a variety of statistical techniques from predictive modeling, machine learning, and data mining that analyze current and historical facts to make predictions about future, or otherwise unknown, events.
Diagramm 1, own graphic account:

*Predictive Analytics in context of business intelligence*

In business, predictive models exploit patterns found in historical and transactional data to identify risks and opportunities. Models capture relationships among many factors to allow assessment of risk or potential associated with a particular set of conditions, guiding decision making for candidate transactions. Decision Making is the last step after data mining, finding pattern and predict. It’s a set of algorithms including all relevant and potential business decision information to take fast directly an advantage out of the predictions without “asking” human deciders.

The step without “Decision Making” is called “Decision Support”. The current forecasts are used by human decider to make there own decision and actions. Regarding to the business, the number of transactions, the single worth of every transaction and the relevant time horizon of an action, the management has to find out, that human decisions are necessary or not. Even in the phase of finding a business case for Predictive Analytics, the business developer have to know about the options what to do with the forecasts (Andrews, 2015).

The defining functional effect of the technical approaches is that Predictive Analytics provides a predictive score (probability) for each individual in order to determine, inform, or influence organizational processes that pertain across large numbers of individuals, such as in marketing, credit risk assessment, fraud detection, manufacturing, healthcare, and government operations including law enforcement. Predictive Analytics is more than “forecasting”. It’s an integrated work around the companies value chain including supplier and customer needs and data. To implement it in the process of business development the company should understand it as a technology to handle future needs and generate revenues from “data-driven” ideas.

**Business Development**

Companies have a Business Development department, managers or tools to generate new ideas for business. Business Development comprises a number of tasks and processes aiming at developing and implementing growth opportunities from new business ideas within the own and between organizations. It is a subset of the fields of business, commerce and organizational theory. Business Development is the creation of long-term value for an organization from customers, markets, and relationships (Pollack, 2012). Predictive Analytics is not a tool to
generate new ideas, it’s the tool to bring data-driven ideas to value generating business operations. Recent systematic research on the subject has outlined the contours of an emerging business development function with a unique role in the innovation management process.

**Examples of Predictive Analytics use cases in different fields of business**

We find them in business functions “Marketing & Sales”, “Financials”, “Risk Management”, “Asset Management” and “Industry”. The following examples should give an idea what is done and where and why Predictive Analytics generate value.

**Marketing & Sales**

For an organization that offers multiple products, predictive analytics can help analyze customers' spending, usage and other behavior, leading to efficient cross sales, or selling additional products to current customers. This directly leads to higher profitability per customer and stronger customer relationships. Companies like Amazon are successful with these recommendations and cross-selling.

With the number of competing services available, businesses need to focus efforts on maintaining continuous consumer satisfaction, rewarding consumer loyalty and minimizing customer attrition. In addition, small increases in customer retention have been shown to increase profits disproportionately. One study concluded that a 5% increase in customer retention rates will increase profits by 25% to 95%. Businesses tend to respond to customer attrition on a reactive basis, acting only after the customer has initiated the process to terminate service (Reichheld, 2014). At this stage, the chance of changing the customer's decision is almost impossible. Proper application of Predictive Analytics can lead to a more proactive retention strategy. By a frequent examination of a customer’s past service usage, service performance, spending and other behavior patterns, predictive models can determine the likelihood of a customer terminating service sometime soon. An intervention with lucrative offers can increase the chance of retaining the customer. Silent attrition, the behavior of a customer to slowly but steadily reduce usage, is another problem that many companies face. Predictive Analytics can also predict this behavior, so that the company can take proper actions to increase customer activity.

When marketing offers consumer products and services in direct mailing, there is the challenge of keeping up with competing products and consumer behavior. Apart from identifying prospects, Predictive Analytics can also help to identify the most effective combination of product versions, marketing material, communication channels and timing that should be used to target a given consumer.

The goal of Predictive Analytics is typically to lower the cost per order or cost per action (Strickland, 2015).

One of the most exiting business cases based on Predictive Analytics is “Dynamic Pricing”. It’s the foundation of success from new companies like “UBER” or even established ecommerce companies like “Amazon”. Dynamic Pricing, also called “Real-Time Pricing” is an approach
to setting the cost for a product or service that is highly flexible. The primary goal of Dynamic Pricing is to allow a company that sells goods or services over the internet to adjust prices continuous in response to market demands. UBER makes different prices for using the car service. Customer using UBER at new year in Manhattan will pay more than a customer in Manhattan at a normal Wednesday (Meier, 2015).

Changes in demand and price sensitivity are tested and controlled by software systems, which gather data and use algorithms to adjust pricing according to business rules given by the company. Typically, the business rules take into account the customer's location, the time of day, the day of the week, the level of demand and competitors' pricing. With the advent of Big Data tools and Predictive Analytics business rules for price adjustments can be made more granular. By collecting and analyzing data about a particular customer, a vendor can more accurately predict what price the customer is willing to pay and adjust prices accordingly.

**Financials**

Fraud is a big problem for many businesses and can be of various types: inaccurate credit applications, fraudulent transactions (both offline and online), identity thefts and false insurance claims. Some examples of likely victims are credit card issuers, insurance companies, retail merchants, manufacturers, business-to-business suppliers and even services providers. A predictive model can help weed out the "bads" and reduce a business's exposure to fraud.

Predictive Analytics can also be used to identify high-risk fraud candidates in business or the public sector. Mark Ngiri developed a risk-scoring method to identify audit targets. He describes the use of this approach to detect fraud in the franchise sales reports of an international fast-food chain. Each location is scored using 10 predictors. The 10 scores are then weighted to give one final overall risk score for each location (Ngiri, 2008).

**Risk Management**

When employing risk management techniques, the results are always to predict and benefit from a future scenario. The capital asset pricing model (CAP-M) "predicts" the best portfolio to maximize return, Probabilistic Risk Assessment (PRA) when combined with mini-Delphi Techniques and statistical approaches yields accurate forecasts and RiskAoA is a stand-alone predictive tool.

Many businesses have to account for risk exposure due to their different services and determine the cost needed to cover the risk. For example, car insurance providers need to accurately determine the amount of premium to charge to cover each automobile and driver. A financial company needs to assess a borrower's potential and ability to pay before granting a loan. For a health insurance provider, Predictive Analytics can analyze a few years of past medical claims data, as well as lab, pharmacy and other records where available, to predict how expensive an enrollee is likely to be in the future. Predictive Analytics can help underwrite these quantities by predicting the chances of illness, default, bankruptcy, etc.
**Asset Management**

Asset Management is the field of managing financial assets like shares, bonds, warrants and so on. The ability to predict is most valuable. If an Asset Manager can predict future prices with a high forecasting quality, he next has to adopt an appropriate trading strategy to make the most out of his information. For many years Asset Management does not use Artificial Intelligence or Predictive Analytics. Markets were too complex and most of the information needed were not, or too late, public available.

In Asset Management not only prices are reasonable to predict. With predictions on volatility or confidence intervals some advanced strategies are possible. Here you obviously see, that not only a software and good forecasts are important. It’s most important to know what to do with the best given forecast on a product or a horizon. If you can predict the volatility of a group of shares, it will be the best to set up a strategy based on options or regarding to products based on volatility indices. These strategy must be quantitatively defined and rules based on predictions included in an automatically acting trading system to have the full Predictive Analytics loop (Ringsdorf, 2014).

**Industry**

In industry there are a lot of ideas focusing on maintenance and automation. Some call it “Industry 4.0” and they are looking for business cases integrating production, demand site and supplier on a more individual level. We are here focusing on simpler cases, “closed loops”. One of the most important use cases is Predictive Maintenance. Maintenance planners are faced the challenge of ensuring maximum machine availability at the same time as keeping the amount of materials consumed by maintenance and repairs to a minimum. Predictive Maintenance opens up new possibilities for all industry companies: Data from sensors monitoring machine condition is automatically reviewed to pick up any patterns that indicate probabilities of a possible fault. This allows maintenance planers the onset of a stoppage to be recognized early and corrective measures to be planned and introduced in the most effective way. It also means unplanned downtimes can be avoided and both staff and resources can be employed more effectively. Predictive Analytics here even uses information on past problems to predict future events (Mobley, 2002).

**Making Predictive Analytics part of Business Development**

Most important for generating own ideas is the understanding of the value chain of Predictive Analytics. There is a technical part like the modeling of forecasting algorithms and quantifying the output into automatically acting systems. The step into business development is to understand the value of forecasting. Find out the parts a forecast is needed to generate value for the customer or the company. What type of data are available internally and what data might be available at external provider, companies supplier and customer's itself. Bringing them together makes new business cases possible.

As part of our own research, we found four indicators, in which cases Predictive Analytics generates values. The fist indicator is to find processes with a huge number of similar decisions
like the running calculation of a Credit Score for potential customer's. The second indicator is to find time-critical decisions like the emergent measurement and fast calculation of human conditions in case of emergency (infarct). The third indicator is a huge number of unstructured, various and unclear data. Like Predictive Policing to predict future crime probabilities with information based on documents, weather, vacation etc. The fourth indicator are situations where it is possible to automate processes or support human decider. An example here is the forecasting of demand and price sensitivity as the base for Dynamic Pricing. After finding some potential use cases with these four indicators, the next step will be evaluating one single case with the highest business worth. The tools to evaluate Predictive Analytics use cases are common.

Diagramm 2, own graphic account:
The six steps towards a Predictive Analytics System

As part of our research, we found out to define six steps to finish a Predictive Analytics project. The first step is to define and set up the business case. You identify a business problem which can be solved with forecasting and integrated systems. Describe the wished solution and the entire idea to management, IT and potential customer to find acceptance. Describe the goals of the solution to exactly show the financial or non-financial benefits and make the idea more transparent to the people who will code the system. In the second step the IT will make a concept of the system. They want to find out what data is needed to theoretically forecast the wished output. Important to know, is that the needed data must not be stored in the own company. You will find important data for money at provider like Bloomberg, weather forecaster or even at your customer or supplier. With the concept starts the detailed modeling of the data model and the sourcing of data internally and externally. In more technical matters experts are talking about “Data Acquisition” and “Data Infrastructure”. The third step towards a running systems is than to clear and prepare the data. With a lot of different data sources, data provider and different types of data one of the most critical parts is the clearing of data. To use data in a software, there are typically some needs like normalization, standardization and validation. For further projects in the field of forecasting a local storage is needed, that makes work for software...
coder more easy. This the so called “Data Infrastructure”. The step number four is to find out pattern and make future predictable with the right algorithms. These algorithms are normally to find in the set of stochastic like linear and non-linear models. In most cases it’s a combination of different models and a partial use of Artificial Intelligence to fasten up the system. This is the step, management has to trust on there experts. These experts are looking for an optimal integration of data and models to extract the first outcome. Outcome here means the first forecasts based on the given information. In the next step, number five, the Predictive Analytics people together with Business Development people need to evaluate the outcome of the system. There are some questions to understand and communicate the mathematical output. In which format are the forecasts „ready“ to understand by own people or the customer? What is about the confidence of outcome? If you want an acceptance of the system, which some people call a “Blackbox”, you have to compare the system with the forecasts or output the human do. To evaluate the quality of a forecasting system you therefore normally need a benchmark and an error metric measurement the human can understand. If there is a high quality in the forecasting and an acceptance of people, you found a system, that might be helpful and value generating for the company. In the last, the sixt step, management has to decide how the system should be integrated and used. There are two theoretical options, a completely integrated “Decision Maker” or a “Decision Support”. The Decision Maker is needed in cases where humans might not be able to handle the number or velocity of decisions. In both cases are options to do it best. To set up a “Decision Maker” needs a clear view of the work and the value chain. It even needs high accuracy in coding the decision tree. A “Decision Support” regards to the visualization and communication to the human decider.

**Diagramm 3, own graphic account:**

*Predictive Analytics value chain, requirements to IT and business units involved*
Results

Predictive Analytics is an area of data mining and “Big Data” that deals with extracting information from data and using it to predict trends and behavior patterns. Often it should predict an unknown event or probabilities of interest is in the future. But Predictive Analytics can be applied to any type of unknown events or probabilities whether it be in the past, present or future. In the research area of economics it is mostly used to predict future events or probability. For example, identifying suspects after a crime has been committed, or credit card fraud as it occurs. The core of predictive analytics relies on capturing relationships between explanatory variables and the predicted variables from past occurrences, and exploiting them to predict the unknown outcome or it’s probabilities. It is important to note, however, that the accuracy and usability of results will depend greatly on the level of data analysis and the quality of assumptions and the database itself. Data can and should be acquired internally and externally to make more business cases possible and the quality of forecast higher. If you are working on a business case and you have the decision between Man or Machine acting, there are four indicators to look for: Various Decisions, Time-critical, Various Data and level of automatisation. As a further step you have to look for the potential reaction time (decision maker) and the quality of forecasting in these given time horizon. The quality and therefore the value of a Predictive Analytics use case is always a question of the time and best forecasting horizon. Predictive Analytics is often defined as predicting at a more detailed level of granularity, i.e., generating predictive scores (probabilities) for each individual organizational element. This distinguishes it from a simple forecasting model. Predictive Analytics always includes what to do with the forecast, how to improve the quality of forecast and decision. For example, Predictive Analytics technology that learns from experience (data) to predict the future behavior of individuals in order to drive better decisions. In our opinion the most important question for using Predictive Analytics is the time horizon of reaction compared with the horizon of the highest forecasting quality.

In the last years most of the done projects were initiated and realized by the IT departments. For these the technologies and models are the most exiting part. We hope to place Predictive Analytics in the heard of the company, in management or Business Development. Only there, ideas will come up, which are able to generate value over the whole business chain, including customer and supplier. Background for our work on this paper is these history of Predictive Analytics „silos“. If it was not the IT department coming up with an use case, there has generally been specific business groups or departments like marketing, risk, finance etc that have advocated and adopted Predictive Analytics. This is what we call only “operational“. As a result, analytics efforts, resources, and applications tend to be scattered across the organization. These business groups have also invested in tools and developed analytical techniques and procedures, with a focus on solving business problems specific to their own group and not on a “strategic”, corporate level.

Shorter product lifecycles in competitive environment mean a shorter window of business opportunity. Organizations need to get quicker at understanding customers, analyzing customer data and responding to customer needs. Business Development has to adopt on techniques to find and project new ideas based on data and forecasting. As seen, these ideas are founded on
a deep understanding of what Predictive Analytics can do and the own value chain. With the four indicators for potential business ideas and the written six steps to a operating system, we hope to provide a fundamental technique to think deeper and make Predictive Analytics part of a value orientated Business Development.

References


Turnaround Management in Smaller Companies
A qualitative research in the Tourism Industry in Germany

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Abstract
The current paper tries to identify success factors for turnaround in smaller companies. On the ground of the organizational path theory, several clusters of research have been regarded to understand the process and the challenges for a successful turnaround management. Thereby several factors have been identified in adopting change as well as a set of different behavioral aspects. These aspects have been further researched by a set of consultancy assignments in the German tourism market. All cases had considerable financial and operational problems. The research methodology is based on a content analysis of 10 consultancy assignments. The results of these cases show clearly, that the key for a successful turnaround management lies more in dealing with behavioral and family aspects rather than with operational business matters. The assignments demonstrated several entities of successful turnaround management in smaller companies. Moreover, the provided knowledge transfer through consultants allowed smaller companies to broaden up their views as well as to find the resources to perform the required organizational change.

Keywords: turnaround management, tourism, organisational change, family firms

JEL classification:

Challenges of Turnaround Management in Small Family Businesses
Turnaround Management is asking for a reorganisation plan of a company in reference to a company crisis. It requires a high standard of managerial experience and the ability to make decisions under high pressure while the idea and existence of the company is threatened (Groß 2009, Hagemeier 1988, Beck 2009). Due to the structure of family businesses, i.e. management, ownership, financed by the family equity as well as the source of the family income, turnaround management as such requires a multidisciplinary approach (Albach 2002, Klein 2010). Thereby in the approach to design a reorganisation plan one needs to cover 4 areas for a successful turnaround management (Rüsen 2009, Werner 2007, Schäfer et al 2004) as demonstrated in the following table:

Table 7: Areas of Turnaround Management in Small Family Businesses

<table>
<thead>
<tr>
<th>Turnaround Area</th>
<th>Key Questions and Content of the reorganisation plan:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Reorganisation</td>
<td>• Market Opportunities • Defining the competitive edge of the company • Reflecting market change into business</td>
</tr>
</tbody>
</table>
| Functional or operative reorganisation | • Taking measures in order to create profits  
• Introducing changes in the product line, customer relationship management, marketing  
• Creating back profits |
|---|
| Financial Reorganisation | • Taking measures in order to generate cash or solvency  
• Introducing controlling and financial monitoring systems  
• Re-evaluation of company assets |
| Managerial Reorganisation and Family Organisation | • Reflecting decision making problems  
• Dealing with succession  
• Dealing with family conflicts  
• Reorganisation of managerial power |

All areas have an influence on the success of a turnaround management in companies. Thereby in contrast to the existing literature, dealing with family matters are an additional entity and differ from a turnaround management in more capital orientated companies (Kehrel 2009, Krysteck 2010). This paper aims to analyze the task of turnaround management in small family businesses by analyzing a set of cases. Thereby, the objective is to determine problem areas in dealing with a successful turnaround management in small family businesses while altering the organizational path.

Definition of Triggers to allow for change on the grounds of the organizational path theory

The organizational path theory allows us to understand how companies may be trapped into a set of decisions which leads to the situation of a company crisis. According to the theory, an organization starts with a wide scope of possible options to choose from in phase 1. In this phase the organization can chose from a set of option in relation to its resources, market opportunities and resources. Due to decision, a critical juncture occurs where the operating range of an organization narrows and leads to phase II. Here the range of options narrow and due to market forces, niche strategies etc. the organization inevitably ends up in a lock-in situation (Sydow et al. 2009). In this state (phase III), decisions and commitments of the past cannot be reversed. Generally, path dependence as a phenomenon is characterized by four properties: non-predictability, non-ergodicity (run ex ante not determined), inflexibility and potential inefficiency (Sydow et al., 2009).

According to the definition of Krystek (1987), a crisis needs to be understood as a situation where prime objectives of an enterprise as compatibility, profitability or solvency are threatened. This definition allows us to understand turnaround management as a situation where substantial decisions are required to ‘turn’ a negative or threatening situation through various actions. The development of these actions requires a managerial process and is by nature a project. The start of a turnaround situation is the recognition of the situation and the perception of the need to take action. The end of the project is the achievement of retaining stability, profitability and the ability to meet the financial obligations of the enterprise.
Research on organizational crisis stays still more on a descriptive level rather than on an analytical and model building one. The focus in the current paper is to understand the process, to define factors initiating an organizational crisis and to take appropriate measures for fixing problems, as e.g. the implementation of financial monitoring systems (Schulenburg, 2008). However, to regard turnaround as a simple matter of fixing problems will not lead to a sustainable organizational development after a crisis, maybe not of assistance at all. It takes a more substantial organizational change in order to retain the required strategic fit. Moreover, the process from the initial information indicating organizational problems up to taking managerial actions appears to be complicated as different publications as well as the daily news of enterprise failures suggest. The complexity of this process contains the combination of more ‘rational’ economic arguments under consideration of a number of psychological and behavioral challenges.

The following clusters of research should allow understanding the reasons and the development of a company crisis with the focus to understand the challenges for a successful turnaround management. While applying the ideas of the organizational path theory into the set of descriptive knowledge for turnaround management, triggers should be to determine a break of a declining and narrowing organizational path. The results of this investigation are as follows:

**Life-cycle and process oriented research.** The pieces of work relate to the Darwin evolutionary approach to organizational development. In the initial way of thinking, the organization got founded with a clear mission and develops in size and efficiency. As the required environmental stability could not be provided, the idea of retention and adjustment are understood as turnarounds. This idea has been developed further by Greiner (1972) in the context of organizational development. He argued that a company prospers up to a certain level within a given set of resources. At the end of such a development period, the coconum of the organizational coat does not reflect the requirements of the organization or its environment. As a consequence the organization stops to develop further, moreover, a declining period starts. It is now the task of its management to adapt to either environmental changes or organizational requirements for survival and further development. In the context of SME this situation could occur while responding to growth, succession, the adaptation of new technology innovation or a changing consumer behavior. The knowledge, preparedness and willingness to accept change are here the key factors for organizational development and survival. Crisis management is here understood as the ability to alter the roles within the organization, through away beliefs and routines. In particular the analysis of company histories demonstrated, companies how had to power and the entrepreneurial strength to make substantial decisions in their mission and market strategies remained successful.

**Chaos theory-based approach.** By employing this approach, a number of parameter constellations in relation to the time have been analyzed (Pinkwart). The set of mind is here to adjust the chaos in the sense of complex and hardly predictable environmental structures to simplified organizational structures and processes for organizational development. In this respect triggers to break the organization path were the timing of success, to notification to take actions as well as the degree of monitoring in order to notice the mismatch. In the context of turnaround management, the handling of pressure is another crucial factor. Further, the
economic consequences of prior decisions or sunk costs are of particular interest. Initial investments are not easily to correct and become a burden within the change period, in particular once financial obligations still urge.

**Leadership-oriented approach.** Research on company failure stated in the majority that a lack of the performance of monitoring systems, a lack of decision making, tracking back from the focus of the mission and strategy, loosing market orientation were factors fostering a crisis. In order to break organizational paths there is a need to provide additional knowledge for change (Schreyögg). Situations are required where managers have the chance to reflect their past performance without questioning the personnel competence (Neuer 2013). The demand is also forwarded to the implementation of innovations as the source for new organizational paths (Meyer/Paulsen 2016).

Small business managers are known for a sound technical and customer oriented knowledge (Thomä/Zimmermann 2012). The biggest problem, however, is to define and implement changes or having the know-how themselves to convert ideas into a management processes. Change as such was regarded as an interruptive factor which has been ignored for a long time. Often there could be observed a bias in the recognition of situations due to cognitive problems or the ability to deal with these issues. Hence, often routines have been installed according to an adaptive learning.

With respect to smaller companies, there is the further argument that managers are often trapped in decision making routines. One reason is the often cited involvement in daily operations due to a perceived need of hands-on approaches to their stakeholders. The lack of performing changes can be traced back to the desire of group thinking as well as to maintain group or organizational harmony. This desire is against the needs performing organizational changes were more opinion leaders are required or entrepreneurs with a strategic vision to small business managers. However, the hang-on approach or the ‘success breeds failure’ theory implies mistakes may lead to undesired results. Embedded with a hold-on approach to existing strategies, or market behavior, decisions are guided more by emotional than by financial measures. Stress or pressure as such leads more to subjectivity in the decision making process as well as to the threat rigidity approach to maintain the ownership status (Neuer 2013). For this reason routines, traditions or the reliance of past successes lead to a behavior to ignore signs of an upcoming crisis rather than dealing with it.

**Environmentally-oriented approach.** The influences to the occurrence of political, judicial, cyclical economic trend or technological trend are here the focus of this cluster of research. Triggers to break here organizational changes are regarded in the alteration of organizational structures in order to comply better with the employment situation. With respect to smaller companies, a high degree of specialization and the tendency to operate in niche markets are regarded as success factors. Change of these market conditions, the up-rise of competitors imply often major changes and increase the burden to adjust to these structural requirements. In addition, developments of globalization and market concentration make smaller companies highly depended to their major customers. This enhances often a fear to break up with existing patterns as the perceived change is questioning the foundations of the enterprise in question.
Finance-oriented approach. The main focus of this type of research is the degree of equity capital of an enterprise. Particular triggers in order to break organizational paths are the possibilities to finance change by new external funding. In particular, research on insolvency showed that a lack of equity as well as non-depreciation oriented financing is the source for financial problems of smaller companies. Due to further risk appraisal demands by banks (Basel III and IV) the request of financial management reporting increased in order to maintain trust and funding possibilities. The access to finance is one of a major obstacle to break up with organizational paths and due to past investments they are often trapped within their financial capabilities.

Entrepreneurship-oriented approach. In particular the entrepreneurial spirit and motivation is questioned to alter the mission and vision of the company in order to reflect changes. Also the level of entrepreneurial education and the perceived role of the entrepreneur are in the focus of research to promote change. The key idea of entrepreneurship is the existence of people willing to take up controlled risk and perform innovation while occurring market disturbance. In terms of entrepreneurship theory (Freiling, 2008), the crisis weakens exploitation (internal coordination and arbitrage) while at the same time exploring (innovation and risk management) is silent. According to the organizational path theory, entrepreneurial activity decreases and makes a turn more difficult and unlikely. Accompanied by considerable path commitment, the lacking entrepreneurial activity has a negative impact on performance with often self-reinforcing effects. Smaller companies appear to be resistant to break their operating frames since their fear of losing securities from existing customers as a guarantee for solvency and income. A controlled risk management has been replaced by the needs of meeting financial requirements.

In addition, one finds also different streams of quantitative research, analyzing more the importance of the various factors for risk elements including the industry, number of employees, legal form or status, age of a company. However, this type of research gives only small insights of the problems in changing the organizational path. Due to the high degree of insolvencies of smaller companies one may conclude, that smallness is not a sign for flexibility in order to break up paths. Financial obligation needs to be seen in the set of company size and appear always crucial. The qualitative research is trying to develop more causal crisis models in order to comply with the process approach to understand company crisis as well as to break its pattern. By classifying external and internal factor occurring company crisis in particular internal factors are of importance in the question of breaking a organizational pattern. The main reasons nevertheless have to be found in the leadership orientated research stream enhanced by a lack of the performance of monitoring systems to recognize and not to ignore environmental changes.

These findings have been converted to a process model to allow a holistic view of an organizational decline. This model is presented in the following figure to understand the issues and tasks within a turnaround situation.
Figure 3: Turnaround Process

Source: Hausschild/Salomo in connection with the IDW 6, own presentation

The following table illustrates the different managerial issues of breaking organizational paths. Thereby the stages have been illustrated according to the IDW 6 (German Institute of Auditors) which also sets standards to reorganization plans to be accepted by financial institutions.

Table 1: Contents, Indicators and Organizational Issues by Crisis Level

<table>
<thead>
<tr>
<th>Crisis Level</th>
<th>Content</th>
<th>Indicators</th>
<th>Organizational and managerial Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Crisis</td>
<td>Management conflicts or succession conflicts cannot be resolved</td>
<td>Presence of the owner manager or entrepreneur</td>
<td>Good feeling of a competitive edge due to a sound financial status</td>
</tr>
<tr>
<td></td>
<td>Due to a good income stability is presumed, investment do not take place</td>
<td>High personnel income due to good profits</td>
<td>Conflicts of between stakeholder reacted with separation.</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial motivation is decreasing due to past successes and vision of a safeguarded future.</td>
<td>Low investment</td>
<td>Uprising challenge and innovation get ignored</td>
</tr>
<tr>
<td></td>
<td>Low innovation rate</td>
<td>Low innovation rate</td>
<td>Managers build up personnel principalities</td>
</tr>
<tr>
<td>Strategic Crisis</td>
<td>Competitors start to test and implement new technology</td>
<td>Customers start to report of alternatives and new market trends as well as own innovation trends</td>
<td>Feeling still in a comfortable situation</td>
</tr>
<tr>
<td></td>
<td>The enterprise maintains a good turnover and profits.</td>
<td>New low client rate or acceptance of offers</td>
<td>Entrepreneurs may separated themselves from their enterprise</td>
</tr>
<tr>
<td></td>
<td>Income of the entrepreneur is good and personnel expectations are meet</td>
<td>Upcoming quality problems</td>
<td>Routines and traditions are answers to an upcoming change</td>
</tr>
<tr>
<td></td>
<td>Low own innovation rate of the company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
<td>Turnover</td>
<td>Profit</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Product and Sales Crisis</td>
<td>Turnover is declining as new product or production methods offer valuable alternatives Profits are still satisfactory and offer the owner still a satisfactory income Upcoming competitive situations are answered by a decreasing prices Marketing and Sales activities get reinforced. Increasing the market spread or accepting also low margin orders. Range of products and services will be increased without questioning the profit margin</td>
<td>Turnover Increasing quality problems Lowering acceptance of offers Major customers stopped the collaboration or orders.</td>
<td>Managers or Entrepreneurs start to operate more in the daily operations. Conflicts between the shareholder and allocation of guilt. Feeling in a reactive position Traditions due to past successes become management issues.</td>
</tr>
<tr>
<td>Profit Crisis</td>
<td>Due to the low turnover profits are at a minimum or losses occur Income for the entrepreneur is not provided by the enterprise The equity capital covers the losses but is decreasing Request for capital for major investments are denied</td>
<td>Turnover Profit-Margin Rate Quality Problems Low-Reinvestment Rate Customer Base First major employees leave the enterprise</td>
<td></td>
</tr>
<tr>
<td>Solvency Crisis</td>
<td>The financial obligation can’t be meet or only with delays Various installment payments are introduced Capital request by the bank are only provided by external securities</td>
<td>Negative working capital Extended payment period First service problems in addition to quality problems</td>
<td></td>
</tr>
<tr>
<td>Filing for Bankruptcy</td>
<td>Enforcement measures of debtors increase the need for money</td>
<td>Number of enforcement measures increase Suppliers stop delivery or only supply by cash payment Credit installments are overdue</td>
<td></td>
</tr>
</tbody>
</table>

The major point of this stage model is that the problems of the previous stage become stronger to the subsequent stages and can be defined as ‘sunk problems’. The problem is that a previous stage performs like an accelerator for the following situation. Hence there is a need to tackle
the stakeholder crisis in the first place. In this context the findings of Greve (2010) are of particular interest in order to understand a problematic organizational path as a consequence of organizational burnout. Past success made the enterprise stable and allowed for material comfort. In particular the engagements to the daily operations, foster further a lack of innovation and ideas. Once signs of an uprising crisis occur that are answered by the routines of cost cutting and price reductions. Moreover, there appears to be a desire of a ‘big bang’ as the adaptation of innovation, new clients as well as a drastic change in the economic climate without considering internal necessary internal measures and know how. In order to break the path and to broaden the up its management there is a need that managers leave, perhaps the feeling of lost chances, mutual assignment of guilt and arrives back to the current organizational realities. The break of the paths however can only be reached by defined turnaround strategies.

All pieces of research suggest that there is a need for external interference. Entrepreneurs themselves are in a too reactive behavior and not in the position to broaden up their mind by their own to define possibilities of their companies. It appears that for the return of entrepreneurial spirit external sparks are requested. Organizational development by entrepreneurs themselves happens only to perfectionism existing products rather than allowing the flexibility to open up for change.

In particular, the management of a smaller company in trouble must add extra know how how to perform the correct measures due limited resources and small organizational flexibility. As they do not have the resources to evaluate turnaround strategies, false or ad-hoc actions since seem more to accelerate the process rather than providing a turnaround.

The Methodology and Description of the Cases

The results of this paper rely on a set of consultancy experiences in the tourism industry. The consultancy assignments have been supported by grants of the Kreditanstalt für Wiederaufbau (KFW – the Germany State Bank). All reported 10 cases rely on a turnaround situation in the hotel and catering industry. Thereby the starting points of the cases habe been always substantial financial and solvency problems. The cases rely on a sample in North Germany and took place in the period of the year 2015. The results of this paper refer to only family owned businesses with less than 20 employees and a turnover between 400 to 800 T€. The approach of the content analysis was based on extracting the reported problem areas, the consultancy process as well as the measures taken for a successful reorganisation. The methodology of the paper was an inductive rather than a hypothesis guided approach in order to identify triggers for successful change. It was a holistic view for a later in depth research. Hence also the employed statistics were pure descriptive statistics rather than sophisticated analytical statistics.

Results of the Analysis of Turnaround Reports

The results of the analysis show in following problem factors and success factors in dealing with the turnaround situation in small family businesses:
Adopting Market Trends and Competition

All cases had problems in converting market trends into business actions. Often one could observe a fear to adopt market, chances as well as on how to implement these trends into the existing service range. Due to the financial pressure, managers concentrated only on their regular customer base in the sense of a constant source of income. Although the turnover of this group is declining, the need of a change has been often ignored due to the fear to lose the last source of solvency.

Coping with Succession

In all cases could be observed that succession took place at a very late stage or with a high age of the former business owner. This practice was treated as a family tradition (5 cases) or in 4 cases the owner was the founder of the business and was fearing the control of his businesses. If succession took place, the owner were older than 75 years, which means that also the follower were in their 50th before gaining a managerial role. As a result, one could observe an age correlation between the age of the customers and its managements. The late succession management contributed to a gap between market developments and the competitiveness of the enterprise. On the other hand all former owners held still the majority equity of the company and were exercising financial control as well as had the power to inhibit still major changes to meet market standards. Often it could observe an attitude, that former owners had the objective that their successor should not become successful.

Focus on cost cutting exercises

Prior the external assistance, turnaround management was in many cases understood as cost cutting exercises and missed out long term business plans. Cost as such was regarded consequently as negative. Often one found a situation that managers saved the company into a crisis. In particular, areas like marketing or investments into a marketing by social media was often neglected. The acceptance of accepting external assistance did rely on the availability of public grant support. However, it was interesting to note, that in more than 7 cases they continued the assignment in the form of a regular coaching.

Financial reorganisation

In all cases it could be observed that the balance sheet did not comply with any financial benchmarks of the branch or particular with private companies, the equity capital was negative. In addition to existing bank loans, the finance was based on the existence of supplier loans which put additional demands on the cash flow. Due to the fact that the banks prior used also prior private securities, there has been often no room to finance any changes within the company. One could observe in 6 cases that the bank took all these securities in offering additional financial rather than encouraging the company to seek professional assistance. This made any later reorganisation efforts very difficult due to problems of funding. Due to new investments and a limited profitability in the tourism industry there was no capital to finance necessary changes. As now the whole branch of the tourism industry is known for financial problems, the financial sector turned away from the branch which is fostering the problem.
Ignorance of the insolvency law

Although the new insolvency legislation is since 1999 in force with several amendments towards a more debtor friendly legislation, the legislation is still not regarded as a chance for a turnover. The stigma of failure weighted heavenly on small family companies as it is still regarded as a failure of the whole family. Even if there exists no real family income, they are afraid of losing control of the business rather than to register for insolvency (see also Imgrund 2009). This situation is often accompanied by a negative image of trustees in Germany (Meyer 2012).

Family Matters

In all cases, one could observe that the key factor in a successful turnaround management was to incorporate family matters or moreover dealing with family conflict in order to create a basis for a business turnaround (Klein 2010). Due to a declining family income through the business and demands on savings, a lot of conflicts accompanied the turnaround situation. One reason has to be found also in the succession problem (Haak 2009). These conflicts always inhibit to implement changes as any activities are evaluated in the light of the former position of the family members. In all cases, one could observe that they look more to find an answer how has to take the responsibility rather than seeking for new solutions.

Focus on Project Management and missing external support

In all cases there was to notice a strong demand on the turnaround consultant to bring up instant results and to release the financial pressure (Harz 2006). Hence, in order to achieve the commitment of the whole family as well as from the creditors, it appears to be important that short term results are achieved. Once the pressure has been released, one could observe that long continual chances took place. During that project period, it was also interesting to note that the focus often changed towards other external assistance. In particular, the major role of chartered accountants got questioned which normally had a central role in the management advice to small family businesses.

Conclusions and Discussion of the results

In all cases it could be observed that the following key factors need to be considered in case of a successful turnaround of small family business:

- To resolve family matters in order to allow the focus of the business. This approach allowed organisation to resolve the stakeholder crisis and to return the original organisational problems.

- To allow for a knowledge transfer and coaching in order to give the organization the resources needed to perform the required changes. In particular the guidance of consultants allowed smaller companies to reduce resistance towards change and to broaden up organizational perspectives.
To find public access to the enterprise to open them up for external advice due to their cost cutting focus.

These factors, mainly determined successful turnaround management in a small family business are these factors determine primarily the behavior of family business managers and, hence, the success of the reorganisation plan. Furthermore the availability of public support is of importance is needed as this enhances the willingness to accept external advice as well as it will safeguard capital losses by the trustees of small family businesses.

The results of this paper are certainly based only on a few cases in the tourism industry in Germany, which do have to encounter a specific competitive situation due to market concentration, branding trends as well as a high price elasticity towards their services. For further research, these variables need to be analyzed in a long-continual research, in particular, as the behavioral aspects of turnaround management in smaller companies appear to be of particular relevance. Thereby the focus of the research should be more to measure the triggers to broaden up a narrowed organizational path for the required organizational restructuring.

References


Beck, Matthias et al, Turnaround, Sanierungen erfolgreich konzipieren, Der Betrieb, Heft 26 vom 02.07.2010, S. 1413 - 1418


Bork, Reinhard: Insolvency Law, Einführung in das Insolvenzrecht Verlag Mohr Siebeck, 5. Auflage, Tübingen 2009


Exler, Markus W.; Gapp, Clemens; Kelz Otokar; Levemann, Thomas; Ortne, Matthias (2014): Das Erkennen einer strategischen Krise: Controller Magazin, Dezember, 4-11


Greve, Gustav: Organizational Burnout: Das versteckte Phänomen ausgebrannter Organisationen. Gabler Verlag Wiesbaden 2010

Grumbach, M; Pauker, H.; Günter F.: Credit loans: Krisenfinanzierung - Wenn der Wind sich dreht in Finance 10/2006, S. 32-34


Harz, Michael: Turnaround Management: Sanierungs-Management: Unternehmen aus der Krise führen, 3. Auflage, Verlag Wirtschaft und Finanzen, Düsseldorf 2006


Icks, Annette (2010); Kranzusch, Peter: Turnaround while filing for insolvency, Sanierungen in Insolvenzverfahren – übertragene Sanierungen und insolvenzplanbasierte Eigensanierungen in NRW, Institut für Mittelstandsforshung Nr. 195, Bonn


John D. Francis, John D; Desai, Ashay (2005), Situational and organizational determinants of turnaround, Management Decision, 43 (9), 1203 - 1224

Kehrel, Uwe (2009); Leker, Jens; Company Crisis, Unternehmenskrisen Zeitschrift für Führung und Organisation 04, S. 200 - 205


Meyer, Hartmut: Management in der Gastronomie, Führung und Finanzierung von Familienbetrieben, Oldenbourg Wissenschaftsverlag, München 2011


Schellenberg, Daniel: Der Strategieprozess in der Sanierung, Verlag Dr. Kovac, Hamburg 2007


Slatter, Stuart; Lovett, David; Barlow, Laura: Leading Corporate Turnaround: How Leaders Fix Troubled Companies, John Wiley, 2006


Thoma Wilke: Turnaround Management Rechtliche Grundlagen der Unternehmenssanierung in Handbuch für Sanierungen, S. 101 bis 127, Schaeffer-Poeschel Verlag 2010


Should companies invest in innovation?

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Abstract
In the beginning, this template describes the actual situation on the market. As a second point, there is a description and a classification of the different kinds of innovation. The object of this template is a scientific examination of the interrelation between innovation and the companies’ future development.

Keywords: Innovation, Market, Marketing, Strategy

JEL Classification: O310

Introduction
Today’s markets are changing rapidly. The environment alters faster and faster. Business companies are forced to adapt to these changing conditions. They have to develop new and adjusted products to be successful on these markets. Companies are offering their products on markets. The more customers’ requirements those products fulfil, the more likely they will be bought.

Innovation can be described as a process of transforming a concept into a product, good or service. Real innovation is seldom, though. More often, innovation is a result of a known solution being transferred into a new context. There are different forms of innovation. In general innovation can be classified in: Basic innovation, product improving innovation, product adjusting innovation, imitation and pretended innovation. These different kinds of innovation can occur within a company as a process, or in a market as a newly developed product. The future of a company depends in many ways on the newly developed products, which in turn are depending on the needs of the customers. Those needs are not always known and needs could also be generated by inventing new technologies. Companies have to consider the development of new products and manufacturing processes in order to stay successful.

Design and structure of the paper
Some of the basics used in this paper have already been discussed by the author in the book “Methoden der Ideenfindung in der Produktentwicklung. Innovationen als Zukunftschance für Unternehmen“. The Ideas of that book will be further developed in this paper. The central issue of this paper is to determine by an academic research, if investments in innovation are worthwhile for companies. The paper starts with an introduction of the methods and techniques
which has been applied. Then the technical terms are defined and described, starting with an explanation of the term market.

The marked is a meeting point of different powers, such as seller and buyer. It is also the fundament of every decision made by a company. What are the main issues to make a company successful? Marketing is a tool for the companies to be able to keep up with the market requirements through their own development. Marketing offers an overview about what the customers want now and in the future. Considering the information given by marketing, companies have to create an own strategy concept. To accomplish the survival of a company, the actual market position has to be maintained. To accomplish a growth of the company, the competitors have to be outmatched to gain bigger market shares.

The next subject will be the term “innovation”. What is innovation and what is the use of innovation? The description of innovation will be followed by a sub classification of innovation into the different kinds of innovation and their description. After that there is a summary of the previous chapters, resulting in an answer to the original question “Should the companies invest in innovation?” Based on those results, recommendations for action are educed for the companies.

Methods

This paper analyses existing information and develops new conclusions and insights. Based on those results, recommendations are educed for the companies. To answer the main question, “Should companies invest in innovation?” there is a split into different sub questions:

- Are the companies pressurised by external sources (like the market) to invest in innovation?
- If they are, how can they measure up to that pressure? If there are reasons to invest in innovation, a methodical way of action is mandatory.
- What is the definition of „innovation“ and are there different ways to describe it?

The answers to the sub questions can be combined to a summary which leads to a recommendation of action for the companies.

Market

Freter (2008) claimed that the market can be sub classified into different product- and service segments. But there are some problems with the breaking down to sub-segments. Also is the market the meeting point between buyer and seller for goods. In this definition, goods include as well services. The market is the meeting place between the seller, the customers but also the competitors. The whole market can be broken down to some segments to reduce the complexity and get a better overview. Today’s markets are changing rapidly. The environment alters faster and faster. Business companies are forced to adapt to these changing conditions. They have to develop new and adjusted products to be successful on these markets.

The products manufactured by a company are sold on the market. Selling products (or services) is the core mission of each company. The better the products, or rather the solution for the customer’s problems is, the more products can be sold.
From a customer’s point of view, products have to solve his problems for an acceptable price. For a seller, a competitor is another seller, who also offers a solution for the same customer’s problem. The decision about who is a competitor is a decision made by the customer, depending on his requirements. According to the book by Hooley et al. (2008) to survive on the market, it is also important to get information about the competitor.

Observing the actions and strategies of the rivals is also a way to gain information about the customer’s orientation. If the competitor has new technologies, develops a new product feature or something more, the other companies have to provide at least equal conditions or lower the price in order to maintain their market shares. Competition and the customers’ requirements push the need of innovation forward. To expand their market shares, companies are to bring some product- or marketing innovation, like better products or a better strategy to advertise their products. Both possibilities start with thinking about a new solution, or a different kind of use. This can be named as innovation, or the start of an innovation process.

Companies make money by selling their products on the market. The customer would buy the products which provide the best solutions for the customer’s demands. Researching the customer’s expectations and wishes is necessary to accomplish this task. Not only the actual, but also the future needs of the customers have to be investigated. The basic approach of Marketing is the analysis of the demands which will be satisfied by the product now and in the future. Who are the competitors, who the customers, on which markets can the products be placed? Kaspik (2008) mentioned that the purpose of the analysis is getting information about which expectations the product should meet and how the product could be set apart from the competitive products.

Intermediary result

External pressure by consumers and competitors forces companies to invest in innovation. To survive, a company has to keep up with its competitors to maintain the actual position. In order to grow, innovation has to be even faster and better. The actual position can be determined by comparing the market shares. If the share shrinks, countermeasures are necessary. Based on the retrieved information and figures, a strategy is developed to react to the market’s actual and future changes and also how to present the products on the market. This is a long-term strategy and couldn’t be changed easily.

Marketing

The main issue of marketing is the customer- and market orientation of the company. Every activity of the company should be oriented on the customers’ needs. Customer orientation is also the guiding principle of marketing. Froboese, Kaapke (2010) mentioned that therefore all the managerial decisions should be in line with the actual and future expectable needs, wishes and problems of actual and future customers. Marketing is a corporate thinking attitude, which will be substantiated by the analysis, planning, implementation and control of all internal and external company activities.
In According to the Book by Bruhn (2010), the company has to appreciate the customer and demonstrate this appreciation to bind him as a regular customer. The seller communicates with the buyer via marketing activity and via products. The products are the most important aspects of this communication. Marketing is used as a backup strategy to the products. A good marketing and marketing strategy can’t replace a good product. The objective of the seller is also knowledge about the customer needs. But price and service may not be forgotten. Marketing is interdisciplinary in two directions. First there are different academic categories: sociology, psychology, engineering, law, managerial-economics as well as natural sciences. On the other hand there are different options in the usage: market research, purchase, HR, product- and price design as well as strategic orientation. Also marketing is a way to monitor the customers and environment but also a communication tool. Furthermore, marketing is used for the implementation and adaptation to the market requirements. All internal activities of a company should follow the structure, which will be organised by marketing. The strategy will be developed in consideration of the market needs. The type of company should be considered.

Table 8: Marketing strategies, see Votteler (2015)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience curve</td>
<td>Experience high, Experience low</td>
</tr>
<tr>
<td>BCG Portfoliomatrix</td>
<td>Question marks, Investment</td>
</tr>
<tr>
<td>McKinsey</td>
<td>Stars, Selection, Disinvestment</td>
</tr>
<tr>
<td>Division – resource portfolio according</td>
<td>Critical resource</td>
</tr>
<tr>
<td>to Albach</td>
<td>Substitute possibilities</td>
</tr>
<tr>
<td>PIMS</td>
<td>Relative market share</td>
</tr>
<tr>
<td>Matrix of influence</td>
<td>Strong influence, Weak influence</td>
</tr>
<tr>
<td>SWOT Analysis</td>
<td>Strengths, Weaknesses, Opportunities, Threats</td>
</tr>
<tr>
<td>U curve to Porter</td>
<td>Specialist (differentiation), Stuck in the middle, Generalist (lower cost)</td>
</tr>
<tr>
<td>Market entry strategy</td>
<td>Pionier (product new), Early follower, Variation, Late follower, Me-Too</td>
</tr>
<tr>
<td>Product Matrix Matrix according to Ansoff</td>
<td>Market penetration, Market development, Product development, Diversifikation</td>
</tr>
<tr>
<td>Product life cycle</td>
<td>Launch, Grow, Maturity, Degeneration</td>
</tr>
</tbody>
</table>

The table above provides an overview over some marketing strategies. All of the strategies include a certain risk. But there is no possibility to generate profit without risk. The strategy is future oriented, but nobody can foretell the future.
For the creation of a strategy it is important to know what the customers expect and what they are ready to pay for the product. The second important aspect for the company is the costs. The producing costs should be much lower than the amount customers would pay for the product. The company should regain all the invested money and all the costs, as well as a surplus to outweigh the risk and for the investment in new products. Companies have to adapt their linecard to the changing market requirements. Obsolete products can’t be sold to the customers—at best for a very small price. An innovative company is able to influence the market. But every investment has to be paid.

The result of every innovation is a new product. The quality of an idea or a product alone can’t guarantee a good result on market. As Kamiske (2010) determined, if the innovation displeases the customer or is too complicated for the customers, only a few people will claim the offer. These customers are the “lead users”. If the idea is new and very different, it takes some time until a trend can develop. This developing process costs a lot of money and a lot of marketing activities. But if the product gets more popular, the company benefits and has a lead position. The company can make use of some protection of the innovation like patent, petty patent and some more to keep the lead against possible imitators.

We already found out that companies are forced to react to the pressure put upon them by the market. But the bigger the company, the more time it takes to react. So changes and adaptations have to be planned in time. The outcome of this planning is a strategy that the whole company has to follow.

To allow proper reactions to the market’s requirements, two different sectors have to be established: A sector of risk and a sector of innovation. Innovation includes both major and minor changes. An extremely major change is called a radical innovation and a cumulate series of minor changes is called an incremental innovation, see Urabe et al. (1988). Completely new ideas are really seldom, as example can be listed the LED or touchscreen. Innovation means to do things or processes in a new way. Generally, innovation consists of old ideas, which are implemented as a new combination or a new process. The innovations arise on the end of a long creative development process. This process starts with creative thinking ideas. Creativity technics allow the connection of different knowledge in different correlation or the transformation of existing ideas to a new context. Often new ideas are discovered accidentally, while the researcher is looking for a solution for a completely other problem. Innovation requires not only financial investments, but also a certain amount of time which should be scheduled.

Sundbos’ (2003) established the following definition of innovation: The Innovation will … mean the work of developing an invented element for practical and commercial use and of ensuring that the introduction of the element is accepted. Innovation consists of the generation of a new idea and its implementation into a new product (and service), process or as a new management. Innovation is never a one-time phenomenon, but a long and lasting process beginning with the generation of a new idea to its implementation phase. New ideas are coming up with the detection of a new customer need or a new way to produce like Urabe et al. (1988) found out.
Product innovation should create new products, with a unique proposition. It is easier to sell unique products, than a copy of another product. The second case is known as the me-too strategy, the innovation process should be concentrated on process reformation and innovation to reduce the costs and change minor details of the products. Generally, innovation begins with researching, which is not always orientated towards profit. Research can be done by universities, schools, companies etc.

Based on the results of the research, the companies calculate the possible success of the new ideas on the market. These ideas will be developed further by the companies into new products. The time before the new products can be brought to the market is very critical. If the company doesn’t have enough resources, other companies could take advantage of this and develop their own me-too products, gaining the benefits of being first on the market.

Schumpeter (2012) describes the innovation process as a creative destruction process, as a perennial gale of creative destruction. In this case Schumpeter classifies the short- and long term innovation. Long term innovation is the more effective option. To be able to invest into long-term innovation, protection against imitation is necessary. This is possible for example with patents and secret process.

Without protection, companies would not invest in innovation. There has to be as much protection as is needed to guarantee that the financial resources invested can be regained before there are imitators with similar products on the market. After this time the protection should be stopped. Otherwise there will be a monopoly position and that also restrains the innovation process. If companies don’t invest in innovation, the old products will soon be replaced by new fabrications, with the result of shrinking market shares and profit. This phenomenon is called ‘creative destruction’. This practice is economical unviable in the long term. As a consequence, investing in innovation is obligatory for a company to survive.

The investment should be adapted to the marketing strategy and the question if long- or short time investment will be taken. There are different ways to describe the term ‘innovation’. The differences can be divides in sections such as market innovation or company innovation, innovation of usage and improving innovation.

Innovation of usage implies the creation of a new need, which did not exist in that way before. This kind of innovation is most often initiated by the technological change. New products replace the old ones and push them away from the market. An example would be the DVD player, which replaced the video player.

Innovation of usage means a new way of usage of an already existing solution. These solutions can also be transferred from another sector. Improving innovation can either apply to the process or the product itself. This kind of innovation takes place in the enterprise level.

**Kinds of innovation**

Corresponding to the grade of novelty and innovation can be differentiated between abrupt (radical) and gradual (incremental) innovation (Gaubinger at all, 2009 p. 6). Innovation can be
sub classified depending to the level of novelty into the following stages according to Gaubinger et al. (2009):

- **Basic innovation**
  Basic innovation is the highest level of innovation. Such innovations are characterized by completely new active principles, technologies or processes. These are innovations in the classical meaning. They are the foundation for numerous smaller innovations. This would be for example the development of the wheel, the steam-engine, the combustion motor or the microprocessor.

- **Improving innovation**
  Improving innovation is a lower innovation level then the basic innovation. Improving innovation tends to the refinement of basic innovations. The main functions are preserved, while single function are further developed, adapted or changed.

- **Adapting innovation**
  Adapting innovation is a middle or low level of innovation. The product features are adapted to the customers’ wishes. The results are different variations of the primary product.

- **Imitation**
  Imitations are copies of already existing products produced by another company, resulting in similar or identical products. The level of innovation is, it at all, very low.

- **Pretending innovation**
  Pretending innovation are modifications without a real value or benefit. The level of innovation is also very low.

The following chart demonstrates the differences of several kinds of innovation.

**Table 9: Differences of several kinds of innovation** in research by Votteler (2015).

<table>
<thead>
<tr>
<th>Kind of innovation</th>
<th>Market innovation</th>
<th>Company innovation</th>
<th>Degree of innovation</th>
<th>Costs of innovation</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic innovation</td>
<td>yes</td>
<td>yes</td>
<td>very high</td>
<td>very high</td>
<td>new</td>
</tr>
<tr>
<td>Improving innovation</td>
<td>yes</td>
<td>yes</td>
<td>high</td>
<td>high to middle</td>
<td>new, old</td>
</tr>
<tr>
<td>Adapting innovation</td>
<td>conditional</td>
<td>yes</td>
<td>low to middel</td>
<td>middel</td>
<td>old + niche</td>
</tr>
<tr>
<td>Imitation</td>
<td>no</td>
<td>yes</td>
<td>low</td>
<td>low</td>
<td>old</td>
</tr>
<tr>
<td>Pretended innovation</td>
<td>no</td>
<td>no</td>
<td>low to minimal</td>
<td>low to very low</td>
<td>old</td>
</tr>
</tbody>
</table>

Sundbos (2003) defines the different types of innovation:

- A new product or new service
- A new production process
- A new organizational or management structure
- A new type of marketing or overall behaviour on the market

The innovation can also have different characters, see Sundbos (2003):

- Technological (objects)
- Intellectual, e.g. consultancy
- Physical movements (which are not technology), e.g.
- Behavioural, e.g. a new strategy for the company’s market behaviour or a new organizational structure

Companies will only invest in innovation, if there is a benefit in form of growth or profit.

**Should the companies invest in innovation?**

The national economy’s capability and competitiveness are depending in an essential way on the investments done by the companies and the government. …On the same time investments can be conductive to the increase of the efficiency of resources and energy, as through power-saving renovations, the realisation of ecological efficient methods of engineering or the production of eco-friendly goods, see Statistisches Bundesamt (2014).

Development and research determine the future and are of great economic importance, guaranteeing long-term wealth. Today’s research and development are tomorrow’s products and services. Innovations are of vital importance for the companies. Only innovations enable the opportunity to survive on the market permanently, they are the key to lasting success and secure the company’s future as Hermann, Huber (2009) mentioned.

Companies are under the pressure to succeed and so they aim to grow and move forward. It is not sufficient to keep the actual level, it’s necessary to keep ahead of the competitors. An exception to this rules are the monopolists. Monopolist’s doesn’t need to invest in innovation because they have a secure position and investments would only lower the profit. All other companies have to fight with the competitors for market shares. If they don’t invest in innovation, will they lose market share and such a company won’t last very long.

But the investment should be suitable to the company’s strategy. For example if the company has a leading market position as an innovation company, investments should be placed in product developing, if the company has a position as a cost leader, they should invest in the process to lower the costs and optimise the product to their own requirements.

Innovations destroy old solutions and replace them. Given the same price, the customer prefers the new solution. If a competitor offers a new solution, the company is expected to build at least an as good or better solution. In order to grow and conquer new markets, the company has to develop new products which have to be accepted on the market or offered on a new market. Chances and risks of offering new products on new markets are very high as the circumstances are incalculable.
**Recommendation for the companies**

In summary it becomes clear that changes on the market are forcing the companies to react. By investing in innovation, companies are able to shape the market and by that apply pressure on the competitors. No company can afford to abstain from innovation in the long-term. Companies are comparable to ships in a certain way: The bigger the company is, the harder is a change of course. Based on the information about the market, companies are developing strategies to survive. Thereby the company has to consider the different kinds of innovation and their attributes.

By increasing specialisation of the companies, more and more tasks are transferred to sub suppliers. The sub suppliers already have in-depth knowledge in their area of expertise, a useful potential for the other companies.

The classic approach of product development should be reconsidered in this context. The sub suppliers along the whole supply chain dispose specific knowledge and experience which the companies can benefit from by including them into the development process and thus improve their solutions. Thereby the links to the sub suppliers get stronger, with all consequences. On the other hand, the company’s employees have also a great potential for innovation. One target of a company is to create a healthy environment where employees can try out their own ideas. There is always the possibility of failure; there is no innovation without mistakes. Employees should be encouraged and not punished for mistakes, depending if the mistake concerns innovation or everyday work. A company is always just as good as its employees.

**References**


Influence of changing consumer behavior on target audience definition in the consumer electronics industry

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Abstract
This article focuses on the changes of consumer behavior with respect to the purchase funnel and evolving customer journeys. The change is accelerated by merging technologies including mobile access and social media. A multi-dimensional transition is in process, where purchases are increasingly performed in multichannel environments. To reach their goals, consumers decide for the most convenient and effective channel for information gathering and purchase decisions at each stage of a purchase process. While customers were traditionally considered to follow a linear path, customer journeys are becoming increasingly complex. These multichannel journeys with different touch points at several stages of the path, challenge companies in approaching customers with the right messages and relevant communication initiatives at the right time.

Companies in newly evolving markets with highly competitive environments need to rethink strategic paradigms to proactively approach the transformation of customer journeys to successfully encounter customers at stages from awareness to advocacy. This article elaborates on a consumer electronics firm and corresponding adjustments that need to be made to arrive at a more behavior driven target group evolving within the purchase funnel. This leads to opportunities for more customized communication and improved reach of the audience.

Keywords: Brand Preference, Consumer Sentiment, Marketing, Behavior, Consumers
JEL Classification: M30, M31

Introduction
To understand how to define the target audience for a product, it is crucial to identify changes in the consumer behavior as well as developments in the environment of shoppers nowadays. Therefore, the first step is to examine customer journeys and their evolvement in our fast moving environment with influences of technological innovations.

Customer Journey and the Purchasing Funnel
Customer journeys represent the end-to-end activities that are needed to satisfy customer needs and wants – all seen through the eyes of the customer – with the goal of creating a smooth and value-adding customer experience. The traditional marketing funnel approach (E. K. Strong, Jr., 1925) maps the journey customers go through to arrive at the actual purchase.
The steps of the initial model include awareness, interest, desire and action (see Fig. 1). Regarding theory, a prospective customer needs to initially become aware of the existence of a particular product, brand or company. According to Strong (1925) awareness is an obvious precondition of purchase and it can be achieved through marketing initiatives. At the stage of awareness, consumers start their journey with a set of alternatives (Esch, F.-R. 2008). This set of alternatives is the sum of products or brands that are knowledgeable to the consumer. With the next step, consumers develop an interest in a certain product group by e.g. being presented advantages and benefits (Boundless Marketing. Boundless, 21 Jul. 2015). This leads the customer to an evaluation of the alternatives and consequently triggers desire in a product or brand that can satisfy their needs. Finally, consumers decide to take action and purchase a product. In this traditional funnel, consumers begin with a relevant set of brands and methodologically reduce the amount of brands to decide on a purchase (Court, D., Elzinga, D., Mulder, S., & Vetvik, O. J., 2009). This linear and top-down funnel lead to certain marketing activities for companies to undertake at each of the stages to encounter customers at predefined touch points. The purchase funnel develops to one with a stronger focus on opinions, preferences, and consideration of consumers, however, it still remains a linear approach in which sales and marketing follow the goal of influencing customers’ decisions (T. E. Barry & D. J. Howard, 1990).

The Path-to-Purchase in Todays Digital Age

Nowadays, firms and their marketing teams encounter a far less linear process of customers moving from awareness to final conversion. Potential customers don’t simply start their path-to-purchase at the beginning of the funnel. Instead, they enter the process at any stage, with additional stages being added to the funnel. Furthermore, customers not only go through numerous stages, they also skip stages, remain in a certain stage or go back and forth between different stages (M. Bonchek & C. France, 2014). Instead of a clear sequence, there seems to
be chaos when analyzing current customer journeys (David K. Hurst, 2012). Hence, customers follow an iterative process instead of systematically following a clear path-to-purchase (Edelman, D.C., 2010; see Fig. 2).

Fig. 2: Iterative path-to-purchase, own creation, based on Edelman, D.C. (2010).

There are different reasons for the changing purchasing-funnel and the seemingly chaotic paradigm behind it. Basically, online, mobile and offline shopping closely grow together. Borders between these different information gathering and shopping platforms are dissolving and there appears to be an omnichannel funnel (Deloitte, 2014; Fraunhofer Verbund, 2014). This means, there is an establishment of a mixture of channels due to a higher convenience for customers. The use of digital technology among customers has become a mainstream platform and the speed of adoption is drastically increasing. This development changes the behavior of customers and has a profound impact on channel usage within the customer life cycle. As an example, the major consumer electronics chain Media Markt offers their customers to shop in-store and have their purchases delivered to their home or they can purchase products online and pick them up in-store on their way home. The new digital age also made the amount of touch points to reach customers more complex (see Fig. 3). Customers are easily finding locations of stores, research products, make price comparisons and consult product reviews. Additionally, they increasingly rely on recommendations from their peer group to make decisions on purchases via Social Media, Blogs or Video platforms. With this digital development, “today’s consumers have more control” (The Boston Consulting Group, 2012), more power, influence others more strongly and are better able to discriminate than before. At the same time, this results in forces that companies and their marketing teams cannot control – “marketers no longer dictate the path people take, nor do they lead the dialogue” (Haven, B. 2007).
This new purchasing path and digital landscape puts a much higher pressure on companies to understand their consumers. This is especially the case for highly competitive and digitally led industries like consumer electronics (Kesteloo, M. & Hoogenberg, M., 2013). In these industries, consumers have learned to rely on digital platforms for gathering information for decision making. At different stages consumers draw on customer reviews on Amazon, test results and comparisons by online blogs like CHIP Digital in Germany, unboxing and trial videos on Youtube, but also instore recommendations by sales staff or promotion teams. Still, many companies are having difficulties to adapt to this evolving customer behavior, which often results in decreasing customer satisfaction and declining success of the firm.

In situations where companies are not able to adapt to new customer behavior, they are getting out of touch with their customers and losing connection to needs and demands. To understand how firms are coping with this development, the Boston Consulting Group conducted a survey with marketing executives in more than 30 major corporations worldwide (BCG, 2012). Next to other challenges, the key challenge that was detected through the survey was, to always know where to reach the customers. This strategic question of how to encounter the customer with marketing activities is crucial and needs to be addressed to achieve core marketing targets like higher consumer awareness, more relevant information for decision making, strengthened consumer engagement, higher conversion rates and increased customer satisfaction (BCG, 2012). In order to determine how to reach customers in different situations companies need to understand who the customer is and how the target group can be defined the best.

**Target Market and Audience Definition**

Historically, the first step for marketers was to divide the market into a defined target market. A target market is a group of customers that the business has decided to aim its marketing efforts and its products toward (Haaijer et al., 1998). Target markets can be segmented by
geography, demography, socioeconomic, psychographic, behavioral or product-related. Subsequently, a target audience for marketing communication needs to be defined. A target audience is a specified group of individuals within a target market at which marketing initiatives are aimed at and it can be different from the target market (Kotler, 2000).

Essentially, the goal of segmentation is to reduce the number of individuals being addressed into a number of mutually exclusive groups that have common characteristics (Yankelovich and Meer, 2006). This helps to predict possible responses of consumers in different situations, in order to align marketing strategies and sales objectives, and to allow more creative and better-targeted strategies to develop. For a target audience, a broad variety of approaches to segmentation can be used (Wedel and Kamakura, 2000). However, recent studies have shown that traditional segmentation approaches have failed to grasp the heterogeneity of consumer behavior (Mason, K., 2002). There used to be a clear focus on consumer oriented segmentation and accordingly the creation of marketing campaigns directed at consumer needs. However, there is a development of consumer marketing to cultural marketing, which rather focuses on viewing the target audience with their whole human spirit instead of merely being consumers of goods (Kotler, P., Kartajaya, H., Setiawan, I., 2010).

In today's globalized age, companies are in fierce competition to deliver continuity, engagement and orientation to their target audiences and therefore, need to exceed pure initiatives of delivering and communicating products and features that are needed. Especially in the consumer electronics business, competing on pure product features or price seems to be no long-term strategy for success (Holt, D. & Cameron, D., 2010). Firms rather need to focus on behavioral and cultural aspects of their consumers and arrive at a cultural brand that even tackles social, economic or ecologic problems of the society (Holt, B., 2004). Keeping this in mind, it becomes clear that there must be an adapted approach to market segmentation and definition of target audiences.

Conclusion

Especially companies in environments with strong competition like consumer electronics need to rethink how they strategically address customers to approach the changes of customer journeys. To paint a clear picture of the customer and determine where to reach them at certain stages, these firms need to define their target audience with regards to cultural aspects. Firms used to focus on the use of surveys and market research to define a target audience. Due to the development of a rather iterative process to purchase, this does not give enough insights into how to reach customers at different touch points. A more behavior and culturally focused approach allows firms to better connect with their customers through more directed messages and relevant stories. To define a new audience, firms should rather look at how customers behave in their typical environment. This way, new themes of segmentation can be discovered. Especially in consumer electronics, the functions of a product might not be as important to a consumer as the value it adds to their daily life. Also, a behavioral focus would show how the relevant target group gathers information and what the main influences are. Important platforms such as online reviews or peer-to-peer recommendations need to be instrumentalized in a
thoughtful fashion to gain trust from customers. This new development should be seen as a chance to reach customers via new ways and with new stories.

References


Court, D., Elzinga, D., Mulder, S., & Vetvik, O. J. (2009), The consumer decision journey, McKinsey Quarterly, No. 3.


Organizational development - Obstacles for a necessary change

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Abstract

There are several obstacles in Order to implement a necessary change. This lack of willingness to change is associated with a lack of culture in the Company. In order to develop a long-term vision required structured training in the enterprises. Learning organizations need new ideas and suggestions and also new Business models. These models and the employee responses are content of this work. Analysis and diagnosis of obstacles and find motivators is the goal. To implement the process with the right communication are the task.

Keywords: Change Management, Diagnostic, Motivation, Organisation

JEL Classification: M10

Topic

The surrounding area of business has changed steadily in recent years. The, unprecedented information transparency or global markets, are a new framework for an even more intense competition. (Kaune, A.,2010, p.15) The demands on the corporate governance are increases and also the desire for a change and new measures. In many companies, there are obstacles to initiate and implement this change. In the following paper some ways will be highlighted to accompany this change. The individual themes will be shortly explained. For the acquisition in a business process, a detailed elaboration is necessary.

Construction

In the first part the obstacles for a change will be shown. The obstacles are firstly in the company management and the second is in the staff. The successful implementation of a organization's development is in direct connection with the participation of all concerned. The leader has to bear and exemplify the development of a model. (Seichter, M, 2003, p. 9) In order to make for both a future-oriented way in a new organization possible, the possible methods are listed in the second part and describe the different ways of analysis and implementation. The last section explains the different competences, how and when they are used and to what extent they need to be present.
Objectives

The aim of the work is to identify the various obstacles with the described methods and carry them out with the help of a new management and with the listed scenarios to complete a necessary change in a company.

Obstacles for a Change

There are different obstacles, to implement a necessary change. Following a few is listed and on some examples will be showed. Especially in companies with a long history are the tradition and the connected management culture a reason. The leadership in those companies is embossed by a Hierarchies leadership style where the force only belongs to the entrepreneur. The slogan in those companies can be: “That is how we always did it”. These attitudes and statements of management prevent the entry of new ideas and methods. This lack of willingness to change is associated with a lack of foresight and lack of culture in the company. Culture in the company expresses how the various parties perceives the group. (Walde, A., 2014, p. 51) A culture can only be formed in individual groups or departments, if the Organisation is a culture itself. Another obstacle is the situation presents itself as a complex and in transparent problem. (Dörner, D., 1995, p.58) There is the fear to recognize this complexity and incompleteness and to make the requirements related.

In order to develop a long-term vision is a structured training required in the company. The training covers all employees, including management, the executives and the company owner. In order to develop new skills and capabilities is a further training essential. Only those who are informed and the future recognizes can endorse a change and can recognize its own advantage position and throw away the egoism and recognize the new benefit in the change. A structurally oriented training binds the employees to the company and creates the attractiveness for new employees. The professionals and staff see themselves in their activates strengthened and the skills shortage is prevented. he implementation of personnel development has further advantages for the entrepreneur. Through the necessary measurement of the existing and the resulting expertise to the training, you get an overview of knowledge in the company. (Gnahs, D., 2007, p. 66)

One of the biggest obstacles is fear. It arises from experience and lessons learned from the past or fearing the future. This fear can block all operations. It prevents troubleshooting and necessary decisions for the transformation of the organization are delayed. (Brandes, D., 2005, p. 62ff)The rejection of a necessary change can be connected with a missing willingness to invest, which arises from fear. The company don’t want to take the risk of a new liability. The behaviour is grounded in a strong insecurity avoidance and the entrepreneur is safety conscious and little predictively.

The scenario management as a solution

For the change and to get rid of the insecurity are scenarios helpful. A possible method is the scenario Management. This scenario Management includes the conception, the systematic
development and also the application of scenarios to identification and development of success and potential benefits and their use in the corporate decision-making. (Fink, A. and Siebe, A., 2011, p. 11ff)

The scenario Management is a shortcut of:

- Future open thinking
- Networked thinking
- Think and act strategically

The decision-making is the job of the corporate governance. The requirement for a successful scenario Management requires a management that can overcome obstacles. It has to be proven if the lead position is manned with the right person. The owner of this top position must be able to assess the situation of the company and identify the existing barriers. The company management has to be able from these scenarios to transform the entire company in a learning organization. This learning organization is an opportunity to get the change in the company and to eliminate obstacles. For the implementation are some requirements necessary, which will be explained in the following chapter.

**Communication in the Company**

Learning organizations require ideas and new suggestions. If the working hours are a 100% filled with the daily work, are no possibilities left, during work time, to deal with ideas or suggestions. It is to consider making clearances between work time where several employees gather in groups and develop new ideas. To promote communication permanently the establishment of platforms is necessary, Think Tanks or sponsorships to not ignore any ideas or stimulations. The networking of various employees and executives is supporting the exchange and the listening.

The consequence of these ideas and suggestions should be an independent work and the ability to a certain extent and to make their own decisions. The working world is getting more complex, the requirements are higher – to make it work and that the learning organisation will function is even coordination important. If the job is active, attractive and has a lot of room for manoeuvre, the willingness for change is greater. Those clearances are relevant for the success of the company and to eliminate obstacles. If help is necessary for this big change, then there is the opportunity to get support and input from outside and to integrate this in the process. This can be a coach, a mediator or a special consultant. One approach in order to deal with people in the professional situation and your position is the prospects Coaching. This process involves both considerations of long-term planning as well as concrete steps to change. The special feature of this process is the integration of experiences and sensations. With these images, strengths, problems and preferences concrete vision with concrete milestones can be defined. (Faller D.; Faller, K., 2014, p. 116ff) With the necessary distance these people can promote self-reflection of individual company members and question things. In addition, new examples and suggestions of other companies are out there and can be included in new models. One of these new models can be the error Culture.
Error Culture in the Company

A common error culture is to blame individual polluters for individual’s errors or for example and entire department for a particular error. If this principle is being viewed from a different perspective, a lot of chances can be found in every mistake. Instead of punishing the guilty one, we should learn from the mistakes. The goal is the solution of the mistake as a result and not the punishment of the offender. The inspiration for the staff is to report the error and to be rewarded. The reward may be varied; it can be oriented to the frequency of the error or its costs. Once the error is known, an open discussion will follow about how it happens, why it happens and how it can be avoided. This new attitude towards mistakes creates trust among employees and encourages them to active thinking along. Of course the employees should not get the impression, no matter what got broken or which mistake happens, there will be no punishment. The sequence is limited to errors in processes and requires a change of consciousness: “I did this mistake” – No punishment – Error/Problem/Cause solve – Solution as a result. (Schüttelkopf, E. - M., 2013, p. 21ff)

Accompanying Processes

To create an agile management, which is much more flexible and completes things with higher speed are processes necessary. The processes must be known to all and be lived by all. An important principle of processes is that they are meaningful and describe actual tasks, and present them plausible, effectively and goal-oriented. At the same time a process is dynamic and it has to adapt to changing situations and circumstances. Any change must be documented in the respective process and be changed; the change is to communicate with all and has to be accessible to all. The introduction of processes requires measures, which give security in the implementation of the conflicting people, technology and organization (Grote, G. 2004, p.157) The solutions from the previous chapter have to be included in the processes, that is how the persons who published an error and worked out a solution are being further strengthened.

Possible reactions of the employees

Necessary change not understanding or not realising can also affect employees and not only the managing directors. The fear to lose the known and familiar and also the uncertainty of which new tasks and responsibilities are lying ahead to the relevant person can be paralysing. There are patterns of behaviour by employees describing below under the label “commitment to change” in a theoretical Approach the various responses to a change.

- Affective – change is supported because it is considered useful and positive, the understanding of the process is good and includes benefits
- Normative – not necessarily carried out a review with well, they follow the change by loyalty to the employer, he is integer, but he can also discuss
- Calculative – Adjustment is done by calculating the least pain for the person

Parts of the described person requires extensive integration into the change, a good option is the creation of pate concept. The Godfather is, at best, an employee who is accompanied with
the change and strongly involved in the process. The Godfather has to be associated positive with the change and the new structures and he can be found in the group of affective employees.

Doppler describes the steps of the behaviour change of adults in other words. Knowledge and understanding -> accept and want -> ability and believe in their own ability -> shall and must -> do and keep doing. (Doppler, K., 2001, p. 316). The support of behaviours of employees and an analysis of the change has as goal a self-coordination of the person.

**Self-Coordination and clearances of employees**

These various opportunities and procedures in the company have the goal for a necessary change and to integrate new processes in the company to secure the success of the company. This includes the independent work of the employees, allowing them to make decisions and giving freedom to the employees to let them try their decisions. This personal responsibility is possible in this framework. (Doppler, K. 2001, p. 316) That is relevant for the success of the company. This self-coordination is important in order to make the learning organization work. This is important because the requirements are getting higher and the working world is getting much more complex. This security should be given to the employees and in this context, the fault tolerance has already been described, so that the self-organization is actually accepted and implemented.

**Diagnostics and organizational diagnosis**

To ensure these freedoms and to secure the necessary output of work, various actions are necessary to target control. The target check may be limited to the implementation of the necessary organizational development or also on employee satisfaction as well as the impact on customers. The following actions can be used as an example for Survey Application:

- Mystery Shopping
- Interviews with employees
- Interface analysis
- Customer survey
- Numbers Material Analysis
- Activity analysis

These surveys have the task to define the basis of the results, the value-adding activities and optimize them. Define means that tasks or locations are evaluated and with a description of the object or the place it can be maximized and with that more time is gained for value creation. In return, the non-value tasks are to eliminate and convert counterproductive activities. Also hidden wastes are to be optimized, which may for example be a workflow that is necessary, which is implemented only much too slow and therefore too much time is wasted with an activity that is needed elsewhere. It is, with the exception of parts of the industry where a band is setting the tune, that about 10% of non-value adding activity will remain in the business. This non-value part of work will be balanced with peak hours till 110% performance on other parts or on different times where this performance is necessary.
Competences - The different Skills

Learning organizations need for lasting success outside of an intelligent error culture or defined processes, the skills required for this culture. Competences are necessary to identify, to assess situations, to give knowledge on and to organize themselves. To assign this work with the same concepts and definitions of the individual competencies, the individual skills will be explained. A statement from the literature is listing the competences as follows: lying in the individual requirements that are needed to operate successfully in a concrete situation”. (Schiersmann, C. and Thiel, H.-U., 2009, p.78) Competences include cognitive abilities and skills in dealing with tasks, also affective, motivational and social requirements to the object-related knowledge in the given situation to successfully apply. Another definition characterizes skills as the ability of people to organize themselves in open and manageable ways and also in complex and dynamic situations. Such situations are increasing fast in the face of today’s economic, as well political and global complexity and dynamics. (Heyes, V. and Erpenbeck, J. and Horst, M., 2004, p.8) Is the statement made by the potential of the affective skills, so is the other a situational and self-organized observation. However, both speak of the most important characteristics of competences, the skills. Competencies are the personal skills that can be used targeted and success oriented.

Skills for a change in the company include:

- Knowledge transfer
- Problem solving ability
- Specialized knowledge
- Teamwork
- Willingness to learn
- Customer focus
- Negotiating skills
- Corporate Values
- Management skills
- Communication skills
- Responsibility for the decisions
- Asses and understand results
- Time management

After Schreyögg are competences the success factors that are made to benefit and arranged so that an optimum use of resources is created. Another capability of the success factor of competence is the possibility of mistakes and learning from this mistake. (Schreyögg, G. and Conrad, P., 2006, p.5ff) This ability to learn is the most substantial expertise in order to achieve the greatest success in learning from the results, the errors and the new knowledge. In addition to this factor there comes another, the “learning en passant”, it is also called implied learning and is the unconscious not verbalized learning. This learning is developing from actions and their relationships and is not primarily seen as a competence growth. It is the situational acting and reacting to reach certain goals or to solve acute problems. (Gnaha, S., 2010, p.21f) These relationships are called “gut feeling” or “intention” and also “experience”. The common features are necessary to get a quick decision in complicated situations, the solution about the
decision is at the time not necessary known. In this case, use is made of the personal experience that has helped in the past, in the same or similar situations to a solution.

**Expertise**

A definition of professional competence by Wilber’s example: “professional competence is the willingness and ability, goal-oriented on the basis of technical knowledge and skills, tasks and problems, properly and method-driven and independently to solve, and to evaluate the result”. (Wilbers, K. 2014, p.70) 

Another representation explained the concept with two components:

Expertise = the ability, certain things to perform  
= General knowledge as superior expertise (Mehnert, A. 2008, p.89)

The task is to identify the person with the necessary expertise and to document their knowledge and to transfer it to other people.

**Methodological Skills**

From this expertise there is the methods competence coming from, because these special methods have their own responsibility, subject specific and personally appropriated to use this knowledge. The research of several different methods supplemented the knowledge to use the skill problem-oriented. The knowledge about the individual’s methods in the company is facilitating the use of the right method for the related requirement. This knowledge of the methods is bound in many companies to a single or multiple persons. If this person is leaving the company then the knowledge is leaving with the person. The ability must be learned all over again and be transferred consuming. The opposite for the competences are the qualifications, mediated by qualifications and educational processes. There are stocks of knowledge and skills, which have to be evaluated and certified by tests. Gnahs, D., 2010, p.21f) They are not called competencies but are learned knowledge that contributes to the skills. Another methodological competence is knowledge, to carry out a change in the company future-oriented. The use of different methods, the including of the affected person and the ability to apply processes organized.

**Social Skills**

In conjunction with the word social skills are often the words used “Motivations”, “Soft Skills”, “Social Intelligence” and “Charisma”. To executives these skills are often required and it is assumed that with them situations are easily resolved and problems are easy to deal with. Knowledge of human nature, and the attentive handling of working with other people, is taken for granted. Self-confidence and the ability to move appropriately in a social field are considered as another competence. (Kunkel, K., 2011, p.37ff)

The Scientific Definition from Kunkel says: “ The willingness and the ability of social relations to live and shape. To collect donations and voltages, to understand and to deal rationally and responsibly with others and to communicate. Associated with the development of social responsibility solidarity. (Kunkel, K., 2011, p.70) For a necessary process of change in a company, social skills are an important prerequisite for cooperation with people. The individual
components of social skills, are in a positive sense, confidence, motivation and sharing of knowledge. On the contrary, this competence is lacking in indifference, lack of coping with stress and the following burnout. (Weiler, F., 2014, p.13ff) To continue the social skills and to complete the project is setting goals and the distribution of tasks and a fixed time management. The objectives of the project are defined and as the distribution of tasks in the part of the product design and marketing strategy. The preparation of the project structure with defined times and with scheduled time buffers prevent stress and ensure the exact targets. These preparations will, consciously or unconsciously, arouse other features of social competence, their interaction with each other, trust and a good working atmosphere. The knotting of social contacts and the associated new tolerance and manners, including the procedure, are further parts of social competence. In cooperation lead the social skills to laws and rules that are written or unwritten. These rules and laws facilitate dealing with each other and carry on recognition and positive feedback in most cases to a successful performance of the work.

Summary
If it is detected in a company, that a change is necessary, the application of several methods is possible to successfully implement the change. At first the obstacles have to be identified and analyzed. If the obstacles are in the attitude of the management then it is difficult to implement the necessary foresight to the entrepreneurs themselves. For the foresight it requires the will to learn and to break new ground. A personal training is the basis of a change, the necessary analyzes or methods are learned and can be used purposeful. The new knowledge helps to assess situations and to draw the right conclusions.

Getting started in transition is the stock of the situation. Among other things, is to consider how the communication within the company runs and whether it can be improved to the necessary locations. The aim is to provide knowledge, at the positions where the knowledge is needed. In this context, the recipient of the message has to be checked. Is the right place staffed with the right person? Can this person transpose the obtained knowledge and the requirements targeted? How are mistakes handled in the company? As an alternative for punishment when mistakes happened is one method to actively finding them and reward the staff. This approach builds trust and supports the process to eliminate errors from the processes in the company. All methods and all scenarios assume that the employees support and endorse the approach. Possible reactions of employees, whether affective, normative or for costing are described. A solution for a positive leadership is the use of godparents. A change is successful if the positions are filled with employees who actively support the change. The necessary control of the implementation can be diagnosed with different procedures. Examples are presented of some actions to make the success measurable.

The skills that are needed to carry out these important steps in a company are among some in expertise, methodological competence and social competence. Without the ability to use these success-oriented skills, a change is difficult. Content of individual competences are the necessary attitudes of the senior executive and the responsible employees.

In summary, the identifying of the situation and connecting with the right methods is the road to a change. The employer and employee leadership must initiate and accompany the change.
Choosing the right methods and approaches, coupled with the expertise to help a successful transition and invalidated obstacles and hazards.

References
Doppler, K. (2011) Der Change Manager- Sich selbst und andere verändern, Campus Verlag, Frankfurt/Main
Grote G. (2004); Schuler, H. (Hrsg.) (2007); Sonntag, K. (Hrsg.) Handbuch der Arbeits- und Organisationspsychologie, Hogrefe Verlag GmbH&Co KG, Göttingen
Heyse, Volker; Erpenbeck, Kohn; Horst Max (Hrsg.) (2004) Kompetenzen erkennen, bilanzieren und entwickeln, Waxmann Verlag GmbH, Postfach 8603, 48046 Münster
Kunkel, K. (2011) Sozialkompetenz-ein Manager Märchen?, Campus Verlag GmbH, Frankfurt am Main
Walde A. (2014) Von der Organisationsentwicklung zum Change Management, Igel Verlag, Hamburg
How to successfully run a cost reduction program in industrial purchasing

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Abstract

In the early 90s the GMs cost reduction program contributed significantly to corporate P&L. E.g. reduction of procurement costs by 5% given a procurement rate of 50% with an EBIT of approx. 5%, as is customary in the car industry OEM, leads to an increase in EBIT by 50% to 7.5%. A comparable increase in EBIT by sales would entail for example a much higher effort; turnover would have to be increased by 50% at a margin of 5%. Cost reduction programs are often executed in procurement organisations across industries, involving external consultants in selected fields. The aim of these programs is to identify potentials and generate sustainable and tangible savings in procurement. Sometimes these programs do not achieve the indicated economic objectives or even fail, though enormous efforts and costs where brought in. This paper is deals with the question of best practice approaches for successful cost optimization and to identify typical criteria for success of respective programs. Beginning with a literature and internet research empirically executed typical cost-cutting approaches will be analysed regarding proceeding, involvement of stake holders and employees, indication of potentials and achievements. Findings will be used to draft a best practice approach in manufacturing industry procurement organization. The outcome of this thesis is intended to help decision makers in preparation and execution of a cost optimization program to consider relevant economic aspects, provide tangible potential indication and sustainable savings delivery to avoid waste of program costs and resources.

Keywords: Cost reduction program, P&L, EBIT, procurement, savings, best practice approaches

JEL-Classification: L62

Introduction

An old saying states: “purchasing is the key to profit”, meaning that cost reduction in the amount of goods and services procured, has a direct impact to corporate profitability. Given an enterprise with a total turn over of 100 Million achieves a profit margin before EBIT of 5%, which equals 5 Million, procuring goods and services of about 50% of its turn over, equaling 50 Million, achieves cost reduction in goods and services procured of 5%. EBIT contribution of the cost reduction would mean additional 2.5 Million and an increase of original EBIT of 50%. If the amount of external goods and services would rise to 70% (which is representative in the automotive environment (Mercer Management Consulting, 2006)), EBIT increase would reach 70%. This little example shows evidently the importance of efficient management of procurement, especially the higher the external value ratio climbs.
Table 1: EBIT impact of cost reduction in procurement subject to external value ratio

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Source: Author

Thus respective industries, which obtain naturally a higher external value ratio have an ambition to lower procurement costs and identified purchasing as the contributing organization. The author is experienced in industrial purchasing, with a career path as employee in automotive industry, consultancy and nowadays running a small consultancy company, focusing on cost optimization. He has participated, collaborated and lead several cost reduction programs and has high business interest to successfully implement and run cost reduction programs.

The outcome of this paper is intended to help decision makers on customer as well as on consultancy side to identify success parameters for a cost reduction program. Besides relevant economic aspects to provide tangible potential indication and sustainable savings, delivery shall be highlighted as well. By introducing the different project phases, explaining criteria of purchasing positioning, showing a best practice approach for strategy refinement and options to establish a team the reader learns about to successfully set up and run a project and minimize risk of failure and waste of resources.

Evolution of purchasing from the early 90th

In the 90th the OEMs of automotive industry were captured between outlet market and supplier industry, on one hand suffering from low margins and risk of production. On the other hand supply chain faced rather low risk and suitable revenues on their products and services. In order to overcome this unfavorable situation OEMs started to concentrate on procurement optimization for EBIT improvement. According to a survey of Rothschild and Roland Berger in 2008 situation evolved and suppliers were squeezed between market and OEMs. Since changed market requirements forced purchasing organization across industries to march a long path to improve their performance ratio, starting with OEMs in the manufacturing industries, e.g. automotive, truck, heavy machinery, agriculture and respective tier-x suppliers (BCG, 2015) followed. Aspects of globalization, e.g. resource constraints, material availability, cultural changes are forcing purchasing organizations to move from purely procuring local to value managing global organizations to cope with all aspects of an international business challenge (culture, compliance, toll & taxes, legal aspects, communication, technology, innovation, etc.). These challenges required new thinking in purchasing. Thus procurement organizations had to change their way of acting (Christian Rast 2008), way of collaboration
within corporation and supplier market. According to an already required study of AT Kearney in 2004 66 per cent of participating organizations had goals in the area of value creation.

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<th>Procuring Organization</th>
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<td>Close to demand carrier</td>
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<td>Fulfillment of demand</td>
<td>Focus cost reduction potential</td>
<td>Company wide synergy effects</td>
</tr>
<tr>
<td>Focus on right quantity, price, timing</td>
<td>Global sourcing</td>
<td>Strategic partnership</td>
</tr>
<tr>
<td>Adhere to cross functional demand directives</td>
<td>VA / VE product cost calcul.</td>
<td>Innovation Mgmt</td>
</tr>
<tr>
<td>Cross functional teams</td>
<td></td>
<td>Risk Mgmt</td>
</tr>
</tbody>
</table>

Source: Author

Before requirements in regard to skill set within purchasing was rather substandard as focus was on procurement and intellectually less demanding. Today especially in the automotive environment employees are well accepted among their colleagues and follow a definite career path, which includes also moves to other disciplines, like engineering, plant or quality management. Also the number of people in purchasing has increased per corporation and caught up with affiliated departments.

As purchasing was not a taught subject before, necessity of training was identified. Experts and procurement specialists established an education market, offering numerous trainings and certificates ranging from practical training to academic awards to prepare for specific challenges (3. BME Forum 2013). Additional know how to suit market requirements is as well offered. Thus education and training to develop a broad set of soft skill and attitude (e.g. empathy, communication style, leadership style, collaborative, etc.) is available.

Meanwhile commercial contribution of purchasing organizations is common understanding in industry. Besides the above mentioned manufacturing industries others followed, also companies along the value stream and even service related industries are implementing a modern and adroit purchasing department.

To steer a purchasing organization successfully ERP-systems were invented and adapted for data based transparencies, purchasing cockpits were composed considering typical KPIs, to allow performance reviews and to enable for corrective directions.

Given the evolution of purchasing expectations have risen at C-level likewise. In a research conducted in 2007 Marlinghaus (2007) points out the importance of purchasing at CEO-level in the directions of cost reduction, serviceability, innovation and product design and risk management. Sometimes organizations fall short on corporates performance expectations, mainly because spend is not managed adequately, savings are not suitable or supply chain performance does not fit. According Roland Berger study in automotive (2008) because corporations do not exhaust key levers. Regardless, if contribution is not satisfactory, this is the time for a cost reduction program, most often with external help of specialized consulting companies. The biggest and famous strategy consultancies cover all aspects of purchasing topics, but there are also smaller ones, who are specialized in certain areas. The approaches followed differ between consultancies. The goal is the same, to improve level of performance,
in general measured by savings. But not all initiated programs run successfully. The risk is aware at C-Level, that’s why some corporations try to run a program on their own or create a healthy mix of Consultancy, external specialists and own sources. Costs associated with an optimization project can quickly reach several Millions.

Table 3: Costs to run a cost down program with consultancies

<table>
<thead>
<tr>
<th>Program size</th>
<th>Team set up (# people, year)</th>
<th>Approx. Project costs, year</th>
<th>FTE assigned by Customer</th>
<th>Potential Savings (1-3 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>2-3</td>
<td>1 m€</td>
<td>0,5</td>
<td>5 - 15 m€</td>
</tr>
<tr>
<td>Medium</td>
<td>4-6</td>
<td>2 m€</td>
<td>1,0</td>
<td>10 - 30 m€</td>
</tr>
<tr>
<td>Large</td>
<td>9-11</td>
<td>3 m€</td>
<td>1,5</td>
<td>15 – 50 m€</td>
</tr>
</tbody>
</table>

Source: Author

Cost compose not only of consultancy fees, but also employees assigned, exceeded time frames and subsequently capacities occupied, delayed or even lost savings and finally loss of reputation within corporation. Interestingly approaches successfully implemented at one corporation may fail at another. Consultancies tend to offer and apply their well-tried and proven method to the customer. It is the task of the decision maker to identify, if the suggested approach is best fit for corporation. It requires a high level of experience to come to a conclusion. Unfortunately cost reduction programs are not run on a regular basis, thus in general decision makers suffer from a lack of experience.

Start it right: Establish Management attention and communication structure

At the beginning of an optimization project it is important to align with the customer organization and ensure management buy in in the sense of attention and support. Second communication is the asset, thus a project office and respective project organization has to be established to ensure steady and clear communication like regular reporting and steering meetings to keep the project on track.

![Typical project organigramm](image)

Figure 1: Typical set up of a project organization, source: Author
As purchasing has interfaces to other departments these affiliated departments should be involved as well right from the beginning. Projects sometimes fail, because of missing management attention or guidance or missing support from cross functional partners. E.g. employees feel not supported in challenging project phases, or need directions in situation that require a compromise between their daily work load and project work.

**What is the problem: How to identify the level of positioning of purchasing**

In order to understand the working and market environment of the organization a look into the organization crucial. Thus before defining an approach or even selecting and applying tools, the initial position of a purchasing organization should be analyzed right at project beginning in an analysis phase. This proceeding leans on to the six sigma approach, invented by Motorola in the early 60th, which is divided in a circle of 5 elements called the DMAIC method (Rehbehn, Yurdakul, 2005). The model is intended to utilize a five phases improvement cycle. Key element is to firstly define the scope of problems, than measure what needs to be analyzed in the following step, make up your mind based on the information gained to develop solutions, rather than coming up with solutions right at the beginning and finally control the improvement (Pande, Neumann, Cavanagh, 2001).

![Six Sigma DMAIC circle](image)

Figure 2: Six Sigma DMAIC circle, source: Author

Relating to a cost down project the first three steps in the DMAIC cycle help to understand purchasing position. In a cost down program these elements can be summarized as analysis phase (see figure 3). The analysis can be an embedded part of an entire program or run as a separate defined pre-program. Subsequently based on the information gained in the analysis phase strategies can be developed and measures be defined. Effectivity of measures shall be monitored in the final control phase. The DMAIC-model is designed as a circle to go through it in an iterative process, meaning depending on the outcome of the final phase one might start the process again, till objectives are reached.
In a cost optimization project control phase should be integrated in the implementation section to ensure sustainable project delivery. M Lemme (2005) recommended to establish a supply marketing to gain permanent actual market information for strategy reviews as a controlling instrument.

Valid calculation tools to verify and evaluate product costs (Teplicka, K. 2015) are very often advertised to highlight achievable savings. But the tools provided offer potentials only, if the initial situation is clearly understood and tools are applied in the right context. According to the introduced DMAIC-cycle positioning of purchasing should be investigated at the beginning, considering four exemplary aspects: cross functional involvement and collaboration, overall corporate situation and finally general economic situation, to ensure a target oriented approach.

![Table 4: four factors of purchasing evaluation](image)

<table>
<thead>
<tr>
<th>Performance within purchasing</th>
<th>Organization</th>
<th>Market</th>
<th>Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing involvement and collaboration</td>
<td>Impact on outlet markets and sales</td>
<td>Trendsetter - follower</td>
<td>General economy</td>
</tr>
</tbody>
</table>

Source: Author

This step is mandatory to understand in which direction a purchasing organization is in need for help before setting up a project and use of tools. Not to say advertised tools miss their intended contribution at all but to ensure best customer related approach possible. The aspects of purchasing power should highlight the performance level of the procurement organization exemplary in 5 dimensions: in terms of people’s know how, the availability and application of modern tools and methods, the structure of the purchasing organization and consideration of superordinate objectives, procurement strategies followed and systems used. PA Consulting recommends a similar procedure as initial analysis in their introduced QuickScan SCM approach (2007) with a focus on 5 aspects of purchasing.
<table>
<thead>
<tr>
<th>People</th>
<th>Tools &amp; Methods</th>
<th>Organization</th>
<th>Strategy</th>
<th>Systems &amp; Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number, Skill set, Knowledge, Attitude</td>
<td>VA / VE, Global Sourcing, Cost Analysis, Supplier Marketing</td>
<td>Central / Decentral, Matrix / Line, Maturity level Cross functional, Balanced Score Card</td>
<td>Commodity structure, Embedding in Corporation, Sustainability</td>
<td>ERP, KPIs, Benchmark, Processes</td>
</tr>
</tbody>
</table>

Meaning of organization aspect is how purchasing is involved in overall corporate structure and reporting line of head. If e.g. reporting line to engineering head exists, quality and innovation might overrule costs, which could cause friction in cost reduction orientation.

Market aspects indicate how enterprise is positioned and products are appreciated by the market. A trendsetter will focus rather more on innovation, as a follower might concentrate on cheaper products. A rising economy may cause a boost in sales and constrain material availability whereas a crisis (e.g. finance crisis in 2007) accounts for insolvencies (Focus Money 2009) and decreasing demands.

Especially the evaluation of performance dimensions of purchasing should be displayed in a quantified manner (e.g. spider diagram, or bar chart) to allow comparison and gap analysis. Measured criteria should be listed and cross marked in case of relevance as kind of prior to this established checklist. A study of McKinsey conducted in 2002-2004 underlines correlation of proper purchasing management with performance. The annually executed BME survey offers typical purchasing KPIs to measure performance dimensions and help to identify relevant corporate KPIs and Benchmarks.

In a recently finalized project the analysis phase was executed inaccurately on commodities. Only 80% of the initially identified commodities contributed, because of unnegotiable valid long term contracts, or shortly signed contracts. This accounted for a loss of potentials of more than 15% compared to indication. Even more the investigation to overcome the loss of potentials wasted additional time and resources and was finally hardly compensated.

**Tools & Methods: how to refine tailored strategies in the creative phase**

Often cost reduction projects follow a very dedicated approach in the sense that the focus in an early stage is on a certain lever, which has proven before. The lever might be valid, but not the only applicable. In order to identify the most appropriate lever set a structured approach should be followed.
After evaluation of the commodity structure in the analysis phase (e.g. run time of contracts, review of terms and conditions, supplier set, etc.), commodities should be clustered to identify groups for similar approaches. A valid tool is the Kraljic-Matrix (Kraljic P. 1983), which classifies commodities in a two dimensional matrix according the complexity of supplier market and the importance of purchasing by commodities. It helps organization to understand the position of their commodities. The tool was invented as strategic management tool to design commodity strategies and manage supply risk and make the most of buying power. Classification criteria for Importance of purchasing can be cost of materials, profitability, availability, impact on security supply, whereas supply monopoly / oligopoly, entry barriers, Uniqueness of product could serve as items for Supply Market Power.

![Figure 4: Kraljic Matrix, source: Author](image)

A helpful tool to determine market power strength is Porter Five Forces (Porter M., 2008). It draws upon industrial organization economics to derive five forces, bargaining power of buyer and sellers, threat of substitution and new entries and rivalry, that determine the competitive intensity of a commodity.

![Figure 5: Porter five forces source: Author](image)

By classifying the commodities and marking them in the appropriate quadrant of the Kraljic-Matrix, the respective goods and services are grouped for dedicated approaches. As a result the commodity groups consider various levers for cost optimization which than allow a tailored handling of each commodity.
For the items marked as strategic further in depth investigation of the buyer and supply power is recommended for risk mitigating actions. Though classic levers like product cost calculation could theoretically be applied to all four quadrants items would rather fit to the leverage or strategic corner than to bottleneck parts where availability is a key asset.

<table>
<thead>
<tr>
<th>Leverage Items</th>
<th>Strategic Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>use full purchasing power, substituting products or suppliers, place high volume orders, corporate demand mgmt</td>
<td>develop longterm supply relationship, risk management and mitigating action, make or buy analysis, contingency planning, analyze in depth buyer and supplier power</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non critical Items</th>
<th>Bottleneck Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>standardization, monitoring, bundeling, catalogue, inventory optimization,</td>
<td>Item simplification, vendors control, overordering in case of availability,</td>
</tr>
</tbody>
</table>

Figure 6: typical levers for Kraljic quadrants, source: Author

Implementation: how to reach sustainability
As mentioned in the beginning collaboration in a modern industrial environment is mandatory and cross functional team approach is a key to success. Partners from e.g. engineering, development, design, quality, logistics, controlling, finance and sometimes IT should be represented in cross functional teams. When GM changed its market approach internally so called creativity teams were established to ensure input from main contributing disciplines. Depending of companies’s size and market approach also involvement of sales and marketing might add value.

The team should go together through all project phases, following the above introduced approach and together analyze data, establish reports, identify levers and derive and refine commodity strategies. In a next step saving potentials and efforts for implementing levers should be calculated and evaluated in a prioritization matrix. Subsequently measures should be defined and a roadmap established. A well proven tool is a Gant diagram accompanied with an agreed upon table of task and responsibilities. Cross functional management buy in is mandatory to ensure interdepartmental support. A signature from all parties involved under an agreed upon measure plan documents the will to mutually achieve project objectives. That is the time to start the implementation phase. Frequent reporting to monitor, steer and follow up on realization progress should be supported by a centrally maintained tracking tool. Finally implemented measures should be handed over to line organization if not transferred before.

Main aspect to reach sustainability is to keep the strategic momentum and to expand refining strategies to not considered commodities as well and keep rethinking available strategies in terms of a continuous improvement process (following DMAIC-cycle).

Once strategies are developed, additional experts might be helpful if the skill set is not available in house.
Execution: How to establish a powerful team under cost constraints

According to the Lünendonk report (2015) management consultancies in Germany expect at minimum a growth rate of 9% in turn over for the upcoming year. No surprise that consultancies are the main driver if it comes to cost reduction programs. Even that management consultancies account for 25% of the entire market turnover there are smaller also well experienced and strategically granted companies available. In general corporations tend to collaborate with consultancies. But to identify the right consultancy for the project requires some smart preparatory work. It is highly recommended to run a concept competition for selecting the best approach for the project intended under involvement of cross functional partners. Consultancies in general offer a broad set of tools and methods to help refining strategies. That’s where they provide most value added, given daily rates ranging from three to five thousand Euros. Consultancies love to implement programs as the business model allows to bring in additional headcount that can be charged to the customer. At this point in time a project becomes expensive. Whereas in the analysis and strategy phase on average 3 – 5 consultants are assigned, for implementation customer are faced with offers including up to 15 people. Provided implementation takes one year, project cost quickly amount to several million Euro. Shocked by these costs corporations sometimes comprehensible decide to do implementation on their own. But there are other possibilities. A study of interim provider Ludwig Heuse (2015) shows daily rates are significantly lower than those of management consultancies and in return provided profitability per each Euro spend on interim managers is higher than factor 2 in more than two out of three assignments. Interim managers are high experienced industry experts in certain fields specialized in selected subjects. Short time onboarding, quick familiarization phase and an expert approach usually distinguishes interim managers.

The question who runs the project depends on various parameters: e.g. budget, company size, complexity of project, availability of people required, skill set of employees. Usually smaller companies tend to run cost down programs on their own, due to limited budget availability. Global companies prefer the help of (management) consultancies.

In an actual running project a selected management consultancy accounted for analysis and strategy phase. For the implementation phase a team of 5 additional consultants was offered to ensure sustainable implementation of refined strategies. As the costs hit several millions, the chief purchasing officer looked for alternatives and established a team of 5 interim managers instead. Attendance of consultants was ramped down while experts were onboarding. A head of external experts was hired before and prepared to introduce the project to and lead the team. Meanwhile the program is running one year and objectives are on track. A powerful team was established that on top helped to transfer knowledge to customer’s employees and to keep project costs within budget.

Conclusion: Do it right the first time

An old saying states: “many ways lead to Rome”. There are different ways to arrange a cost down project and there is no purely right or wrong. But obviously there are some key elements, which definitely determine success more than others.
Core question before project set up is always the right approach from two angels, customer and consultant:

1. Customer: what is my objective, what is my current performance status, how can I contribute, who can suit my needs best (internal, external)
2. Consultant: what is customer’s objective, how does my competency, approach fit, what is my unique selling point compared to competitors

The answer to the questions above can be found in the approach introduced in this paper. Major success impact from a customer perspective is to compare consultancies and to challenge their concept for project execution to select the most capable one before starting a project. After selection of best fitting consultancy before identified core objectives should be detailed and scope and project content defined. That is when the project could start and follow the above recommended path:

- Align with customer team(s)
- Establish cross functional teams
- Identify current positioning of purchasing, (follow DMAIC approach (Measure, Analyse; Improve [rather than come up with ideas at beginning], Control))
- Use KPIs & Benchmarks and identify performance gaps
- Classify commodities and derive levers with Kraljic Matrix
- Evaluate and prioritize levers
- Define measures, establish roadmap and assign responsibilities and due dates
- Follow up and monitor implementation

If additional external help is required at any stage, weigh value add and costs of experience before pulling a team together. For instances interim managers obtain global industry experience and could serve as a paying off staffing alternative.

The introduced approach should be considered in cost optimization projects to provide tangible potential indication, implementation of a roadmap to deliver sustainable savings and subsequently avoid waste of program costs and resources, so that the project will run successfully the first time.

References


AT Kearney, (2004), “creating value through strategic supply management”, internal material


BME-Umfrage (2008), „Top-Kennzahlen im Einkauf“,internal material

Brainnet, Marlinghaus T., „Auf halbem Wege? Die Rolle des Einkaufs aus CEO-Perspektive“, Bonn, internal material
Christian A. Rast (2008), Chefsache Einkauf, Campus Verlag, Frankfurt New York

Focus Money Online 2009, „die bitteren Folgen der Finanzkrise“, [retrieved March 10],


Lemme M. (2005), Erfolgsfaktor Einkauf, durch gezielte Einkaufspotlitik Kosten senken und Erträge steigern, Cornelsen Verlag, Berlin


McKinsey&Company, “GPE Team of McKinsey and SMI, global purchasing excellence”, internal material

McKinsey, Baumgartner F., Küpper J. ,Reinecke N., Weerda K., „Wie gut ist ihre Einkaufsorganisation“, internal material


PA Consulting 2007, “Supply Chain Management Organisation optimieren”, internal material

Pande, P.S., Neumann R.P., Cavanagh, R.R. (2001), Six Sigma erfolgreich einsetzten, Verlag moderne industrie


Rehbein, R., Yurdakul, Z. B. (2005), Mit six Sigma zu Business excellence, Siemens, publicic corporate publishing

Roland Berger Strategy Consultants (2008), Automotive suppliers procurement study

Roland Berger strategy consultants (2008), SupplierBusiness key results 2008, issue 10, End of Year Survey

Rothschild, Roland Berger Strategy Consultants (2008), Global automotive supplier study

Legislative Factors Influencing Enzyme Markets

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Abstract

Enzymes are specific kind of natural catalysts. Enzymes contributed in great extend to the traditional and modern food and technical industries. This article is mapping legislation factors influences on enzyme markets in EU countries. The recent legislation development and it’s impacts on enzyme markets and industrial applications. Then the expected future developments of EU legislation until 2020 are described. The dynamic changes on enzyme markets means that customers, distributors and even producers are operating in a context of uncertainty and risk that products they use will be outdated and effectivity of their production process or price efficiency of their products will be lower than competitor’s. One of the keys how to handle and minimize such risks for producers and distributors of enzymes is to keep close contacts with customers to understand their needs and be involved in customer’s new product developments.

Keywords: Enzymes, market analysis, enzyme consumption, industrial enzyme applications

JEL classification: F17, O57

Introduction

The first completely industrial process was developed more than 50 years ago. Nowadays enzymes are used in many industrial areas such as food, feed, personal and home care, textiles, industrial cleaning, textile and tanning, pharmaceuticals as well as crude oil production. At least 50% of enzyme products marketed today are obtained from genetically modified organisms, using genetic and protein engineering. Developments in last 2 decades in process technology allowed to use of recombinant techniques to improve yields of enzymes produced by microbial strains, to improve stability of products and even altered specificity of enzymes. Use of genetic and protein engineering techniques raised the discussion about gene modification technology and possible influences on humans. Requirement of new regulations and legislative acts covering such important topic was obvious. Enzyme products are affected directly or indirectly by a large number of legal acts of European Union, national acts and also specific industry and applications focused policies. Analyse of existing legislation and policies impacts on enzyme markets is essential building block for enterprises acting on enzyme markets. Such analysis is complicated for two reasons: enzyme products does not cover single application or industry, but a broad range of applications in various industrial segments with completely different characteristics, qualities and uses. Second reason is: legislative acts handling manufacture, use, sale, and disposal of enzyme products are not one uniform, but varies per industrial segment, application country and also historical preferences.
**Aim of Article**

The aim of the article is to analyse current legislation status applicable on the enzyme products. The article is focused on area of EU legislation, which is being harmonised and implemented in EU Member States gradually. Article describes legislation currently in force by industrial sectors and also general legislation acts covering enzyme products in general.

**Methodology**

Preparation of the submitted contribution required utilisation of basic scientific methods. Beside the synthesis, deduction, comparison, monitoring, observation and inquiry were used in further parts of the research.

**Industrial Applications of Enzymes and Enzyme Types**

The technological innovations in the dynamic and turbulent product markets of biotechnology, materials and information and communication technologies are poised to influence the strategic options available to enzyme businesses. The rapid rate of innovations of enzyme products, updated production methods, newly developed procedures including gene expression and other genetic manipulations of microbial strains and even techniques affecting directly structure of enzyme protein dramatically indicates the fast moving nature of enzyme markets. Boutros Sarrouh et al., (2012) The dynamic changes on enzyme markets means that customers, distributors and even producers are operating in a context of uncertainty and risk that products they use will be outdated and effectivity of their production process or price efficiency of their products will be lower than competitor’s. One of the keys how to handle and minimize such risks for producers and distributors of enzymes is to keep close contacts with customers to understand their needs and be involved in customer’s new product developments. Batten D. (2010) This approach leads to fast increase of enzyme products used in different applications. In below table are mapped main applications of enzymes sorted by industrial sector. According Herzka and Kajanova Legislation criteria determine strategy and specificities of food and chemical companies. Herzka P., Kajanova, (2010).

<table>
<thead>
<tr>
<th>Industrial sector</th>
<th>Specific application</th>
<th>Enzyme type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food production</td>
<td>Bakery products</td>
<td>Amylases, cellulases, lipase</td>
</tr>
<tr>
<td></td>
<td>Milk and dairy products</td>
<td>Lactase, rennet, transglutaminase</td>
</tr>
<tr>
<td></td>
<td>Fruit juices and smoothies</td>
<td>Pectinases</td>
</tr>
<tr>
<td></td>
<td>Protein based products</td>
<td>Proteases</td>
</tr>
<tr>
<td>Starch industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil and fat industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flavour productions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 Main applications of enzymes sorted by industrial sector
<table>
<thead>
<tr>
<th>Ethanol production</th>
<th>Amylases, proteases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and meat based products</td>
<td>Proteases, Transglutaminase</td>
</tr>
<tr>
<td>Wine and beer production</td>
<td>Various enzyme types</td>
</tr>
<tr>
<td><strong>Personal and home care</strong></td>
<td><strong>Dental hygiene</strong></td>
</tr>
<tr>
<td>Skin treatment</td>
<td>Proteases and others</td>
</tr>
<tr>
<td>Washing powders, gels etc</td>
<td>Proteases and others</td>
</tr>
<tr>
<td>Industrial cleaners</td>
<td>Proteases, lipases, and others</td>
</tr>
<tr>
<td>Dishwashing products</td>
<td>Proteases, lipases, and others</td>
</tr>
<tr>
<td><strong>Pharmaceuticals and diagnostics</strong></td>
<td>Blood glucose</td>
</tr>
<tr>
<td>Urea</td>
<td>Urease</td>
</tr>
<tr>
<td>Blood urea</td>
<td>Alcoholdehydrogenase</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Cholesterol oxidase</td>
</tr>
<tr>
<td>Blood triglycerides</td>
<td>Lipase</td>
</tr>
<tr>
<td>Blood CO₂</td>
<td>Carbon anhydrase</td>
</tr>
<tr>
<td>Urine steroids</td>
<td>D-glukuronidase</td>
</tr>
<tr>
<td>ELISA systems (incl. EMIT)</td>
<td>Various specific (patented)</td>
</tr>
<tr>
<td>Bio-sensors</td>
<td>Various specific</td>
</tr>
<tr>
<td>Anti-thrombosis products</td>
<td>Streptodomase</td>
</tr>
<tr>
<td>Antibacterial products</td>
<td>Lysozyme</td>
</tr>
<tr>
<td>Blood pressure control</td>
<td>Kininogenase</td>
</tr>
<tr>
<td>Digestion aids</td>
<td>Pepsine and others</td>
</tr>
<tr>
<td><strong>Technical applications</strong></td>
<td>Textile production</td>
</tr>
<tr>
<td>Leather production</td>
<td>Proteases</td>
</tr>
<tr>
<td>Paper production</td>
<td>Amylases</td>
</tr>
<tr>
<td>Oil and gas</td>
<td>Fenolperoxidase and others</td>
</tr>
<tr>
<td>Waster reprocessing</td>
<td>Cellulases and others</td>
</tr>
<tr>
<td>Biofuels</td>
<td>Various</td>
</tr>
<tr>
<td>Bioremediations</td>
<td>Various</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Feed Industry</td>
<td>Phytase and others</td>
</tr>
</tbody>
</table>

Source: own elaboration

Variability of industrial uses of enzymes leads to high amount of specific products issued for every special application to meet criteria defined by legislation acts for specific industry segments.

**European and National Legislation Acts on Enzymes**

Enzymes and enzyme blends mixtures and concentrates produced in the European Union and in non-EU countries are regulated in different legal acts. Concerning production of enzymes used for industrial applications are regulated by base Directive 1999/45/EC. On development of legislation concerning enzymes cooperate with European commission also Association of Manufacturers and Formulators of Enzyme products (AMFEP), which represents enzyme manufacturers, blenders and distribution companies handling with enzyme products on European markets and representing their interests towards European Commission. AMFEP closely cooperated on development of legislation of enzymes which are currently in use as Directive 67/548/EEC being used for classification of enzymes into the system of EINECS codes. JRC (2007) Difficulties arises from notification requirements for enzymes were noted on especially organised meetings with competent authorities about implementation of Directive 67/548/EEC. One of major issues were to ability to prove that 2 enzymes are identical, the problem is caused by declaration of catalytic activity and chemical structure. With chemical structure of macromolecules it is known problem of mapping three-dimensional structure of enzyme which is difficult to analyse. Other approach is to cover enzymes from natural occurring organisms as EINECS entry „, natural occurring substances“, which of course does not cover enzymes produced by GM (genetic modification) techniques, which competent authorities take as new substances. Bottcher D, Bornscheuer U. (2010) Number of enzymes being produced by GM technology rapidly arise, due significant efficiency advantage in production, but also due improved technological properties of enzyme actions during catalysed process. Based on this problem EINECS is considered as inadequate as a reference for enzymes. Directive 92/32/EEC was base for creation of enzyme list os all enzymes reported as used in industry and on the market until fixed date. AMFEP participated on this project, with several updates, also currently preparing new harmonised legislation for food applications under name „Joint Food Enzyme Dossiers“ where AMFEP is one of authorized entities to submit dossiers to be approved in new Directive. For technical uses enzymes are also covered by REACH legislation, where Amfep was also participated on creation of rules, which are currently valid. Except general legislation covering all enzymes, exists particular legislation acts which are harmonised for EU Member States. Such harmonised acts exists for food, feed, personal and home care and pharmaceutical products. Rest of applications is covered by general legislations as REACH and CLP, for time being.

EU REACH Regulation 1907/2006 for Registration, Evaluation and authorisation of Chemicals“ says that technical enzymes (paper, textile, oil industry, bio fuel industry, personal care, home care etc.) and placed on, manufactured in or imported into the EU market above quantities of 1 metric ton per year by any legal entity must be registered under the conditions given by mentioned Directive. Kajanová, J. (2015). Depending on quantities placed on the EU
market and on the classification of the enzyme, different registration deadlines were applied. The principle is that the higher the tonnage is, the earlier the registration deadline is. First 2 deadlines already passed:
30th November 2010 was deadline for enzyme substances placed on the EU market in quantities equal or higher than 1000 metric ton per year, or belongs to specific category according Directive.
31st May 2013 was deadline for enzyme substances placed on the EU market in quantities equal or above 100 metric ton per year; and finally
31st May 2018 is deadline for enzyme substances placed on the EU market in quantities equal or above 1 metric ton per year.

The pre-registration phase has officially ended on 1 December 2008. Yet, if after this date, a phase-in substance is manufactured or placed on the EU market in quantities exceeding 1 metric ton per year for the first time, it is still possible to submit a late pre-registration to ECHA. In that case, the substance could benefit from an extended registration period described above while being allowed to be commercialised in the EU. Such a „late pre-registration“ needs to take place within 6 months of the first manufacture or import of the substance in quantities of 1 ton or more per year, and no later than 12 months before the relevant phase-in registration deadline.

In all other cases, the manufacturer or importer should register its substance immediately before placing the product on the EU market.
As of the second registration deadline of May 2013 (substances manufactured or imported in quantities of 100 to 1000 metric tonnes per year), seven enzymes have been registered. These are glucoamylase, subtilisin, cellulase, mannanase, alpha-amylase, lipase and laccase. The biggest wave of registrations is expected to happen in 2018 when lower tonnage products (1-100 metric tonnes per year) will have to be registered by the third and final deadline of 31 May 2018.

Enzymes belongs also under the EU CLP Regulation 1272/2008 (for "Classification, Labelling and Packaging") adopts Globally Harmonised System on the classification and labelling of chemicals (GHS) across all European Union Member States. The regulation requires companies to appropriately classify, label and package their substances and mixtures before placing them on the market. It complements REACH Regulation and will eventually replace the current system contained in the Dangerous Substances Directive (67/548/EEC) and the Dangerous Preparations Directive (1999/45/EC). Cushion E. et al. (2010) The CLP Regulation is already applicable to substances that are placed on the market since 1 December 2010. It was not mandatory to use the CLP classification system to classify chemical mixtures (preparations) until 1 June 2015. There are certain limited circumstances where these transitional arrangements for substances and preparations/mixtures could be extended: the re-labelling and re-packaging of substances and mixtures which are already labelled and packaged and in the supply chain (‘on the shelves’) on the above compliance dates may be postponed until 1 December 2012 and 1 June 2017 respectively.

For certain substances the classification is harmonised and made obligatory. Currently this is the case for 17 enzyme types. CLP introduces a new duty on every manufacturer or importer to notify details of the substances which introduce on the market to the Classification & Labelling (C&L) Inventory. This is the case for:

- substances subject to REACH registration and placed on the market;
- substances classified as hazardous and placed on the market on their own;
substances classified as hazardous and placed on the market in a mixture, resulting in that mixture being classified as hazardous.

Notification can be done as a group of importers (e.g. legal entities of the same company, or AMFEP), and substances need to be notified within one month from being placed on the market. As a consequence of Art. 45 of CLP Member States can have an institution, e.g. Poison Center or Product register, to which companies placing on the market mixtures classified as hazardous should notify product details like chemical composition. This information is to be used in the event of emergency health response.

Legislative of Enzymes Used in Food Industry

In general enzymes can be used as food additives, or as processing aids. The main difference between those 2 groups is that food additives do have technological purpose in the final product and processing aids are used only during manufacturing steps of product and in final product has no function or are inactive or removed. There is only few enzymes considered as food additives (lactase, invertase, lysozyme, transglutaminase) in certain applications, and in other applications same enzymes can be considered as processing aids. BCC Inc., (2009)

The main difference from regulatory point of view is that food additives regulation is harmonised in EU Member states already and legislation of processing aids is still governed on local level. This creates differences between uses of enzymes in various applications – most know example is Germany and Austria, where enzymes are not allowed to be used in beer production. In some member states there are no restrictions on place, second group ask for authorisation procedure by local administrator and controlling authority. Additionally some local legislation permits certain enzyme to be used in defined applications (most known example: transglutaminase in meat industry).

Much bigger differences in legislation are with allowance to use techniques of genetic modification and especially use of recombinant DNA techniques in xeno-organisms. Theoretically enzymes might also be considered as food ingredients. In this case enzymes from GMO would be regulated by the Regulation (EC) No 258/97 of 27 January 1997 concerning novel foods and novel food ingredients. In such case importance of exact definitions of food additive and processing aid is extremely high.

Food additives means any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods.. (Directive 89/107/EEC, Article 1.2).

Processing aids means any substance not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods or their ingredients, to fulfil a certain technological purpose during treatment or processing and which may result in the unintentional but technically unavoidable presence of residues of the substance or its derivatives in the final product, provided that these residues do not present any health risk and do not have any technological effect on the finished product.. (Directive 89/107/EEC, Article 1.2).

Enzymes used as food additives are also covered by Directive 93/77/EC, which allow use of selected enzymes in fruit processing and Regulation No. 1622/2000 allow to use enzymes in wine production. Additionally all enzyme products has to fulfil purity criteria for food additives.
Legislative of Enzymes Used in Personal and Home care

In EU the production, sales and control of personal care products is harmonised by Directive 76/768/EEC, which is focused on personal care products. Enzymes used in personal care must meet criteria of Articles 1 and 2 of the mentioned directive. There are no other special notes regarding enzymes, just all products must meet general criteria for safety of the users. As addition to directive was published document under name „The Notes of Guidance for Testing of Cosmetic Ingredients“, which has to be used for safety evaluation. Kircher M. (2010) Annex VII handle Biotechnologically Derived Ingredients (enzymes included), and if a „modified“ microorganism or a potential toxin has not been fully removed, amongst other things specific data must be available, which can provide:

- description of organisms involved: donor organisms, recipient organisms, modified microorganisms,
- host pathogenicity,
- toxicity, and if possible, identity of metabolites, toxin produced by the organisms,
- fate of the viable organisms in the environment-survival potential for the transfer of characteristics to e.g. natural bacteria,
- physical-chemical specifications,
- microbiological quality,
- additional external contamination,
- preservatives added.

Enzymes applied in Personal and Home care are exempted from Dangerous Substance Directive 67/548/EC and are covered by Directive 76/768/EEC with one exemption. According to AMFEF, primarily the potential for sensitization of the respiratory tract has to be considered when applying enzymes in personal care and cosmetics products. Lamers P. et al., (2012).

Legislative of Enzymes Used in Feed Industry

Enzymes as additives in feed industry for animals and fish covers Directive 70/524/EEC and 87/153/EEC. These directives strictly defines using of the enzymes, not only types, but also identification, origin, gm techniques toxins and many other parameters. Feed market is quite well defined and partially closed as registration of companies and product is mandatory. To register the product, the applicant must provide complete data about long term testing, with strictly defined parameters, which is one of the main barriers to entry the market. In whole EU acts only 61 time restricted and 1 non-restricted authorisations. Kirk O, Borchert TV, Fuglsang CC. (2002). This process is covered by Directive 93/113/EC. Every legal entity introducing feed products must successfully meet local criteria for entering feed market after successfully passed the criteria the entity get unique Alpha number which approves the subject to act on feed market for specific products.


Legislative of Enzymes Used in Pharmaceutical, Veterinary and Diagnostic Industry
Medicinal use of enzymes is covered by Directive 65/65/EEC and Regulation 2309/93/EEC. If medicinal products were produced by biotechnological methods, they must be authorised by European agency for Evaluation of Medicinal Products – EMEA. Into consideration before approval are taken not only parameters of products but also methods of production, use of GM techniques, used raw materials and its quality and purity, etc. Enzymes for therapeutic applications are beyond the scope of AMFEP. Therefore, no information was obtained from the industry. For pharmaceutical and veterinary applications a very high purification and safety standard is required, especially when they are administered intravenously. (http://ec.europa.eu/enterprise/policies/innovation/policy)

Conclusion

Actual situation of the legislation in EU countries indicates necessity for further harmonisation and simplification of EU and national legislative directives and regulations. The current absence of unified approach to enzyme based products can have negative influence on European companies who produce enzyme products and also retail and distribution companies. Sometimes current legislation creates the significant obstacles for companies using and handling with enzymes. It is clearly visible on competitiveness of EU players on biofuels markets where EU has weaker position, partly due non harmonised legislation of enzymes and usage of GM techniques in comparison with rest of the World, where legislation of enzymes in technical applications is not completely merged together with chemicals. It is possible to identify several barriers which legislation creates:

- lack of direct communication between Legislation Authorities and Industry Subjects,
- the competitiveness of the bio-based products compared to “conventional” chemicals, specifically no monetary added bonus for ecologically friendly bio-based products,
- slow harmonisation of EU and local regulations,
- the European regulation complexity,
- necessity of spreading bio-based products from chemicals in legislation,
- no harmonisation of legislation between EU and non EU countries.

References


Boutros Sarrouh et al. (2012), Up-to-date insight on industrial enzymes applications and global market. Bioprocessing & Biotechniques,


European Communities, (2002), Collection of information on enzymes, Brusel

Herzka P. and Kajanova J. (2010), Ekonomika manažment podniku, Bratislava


JRC (2007) - Consequences, Opportunities and Challenges of Modern Biotechnology for Europe, Brusel

Kajanová, J. (2015), Efficiency of Food Enterprises in Slovak Republic. In: Globalizácia a jej sociálno-ekonomické dôsledky, Žilina


Lamers P. et al., (2012), Renewable and Sustainable Energy Reviews
Prognosis of Direct Taxes in Slovak Republic

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Abstract
The contribution deals with the direct taxes development in the Slovak Republic and their prognosis in the future. Direct taxes are an important part of the tax system. Their development is relatively conservative. Currently, professional discussions on the topic of taxation addressing mostly the problem of scarcity of public funds, problem of government deficit, the amount of the tax burden on the business community subsequently the link to Europe in the form of a joint approach to taxes, harmonization, stability and the protection of the European currency (the euro) rescue of countries struggling with the consequences of irresponsible management and negative impacts of the economic crisis. Within the contribution we present forecasting methods of direct taxes, analyse factors influencing their development and formulate their anticipated future development. In the course of research the following scientific methods were used: analysis, synthesis, deduction, comparison, and monitoring. In accordance with the principles of scientific work the structure of the paper is following: introduction, aim of the paper, methods, results, discussion, conclusion, and references. Since tax revenue forecast has according to the Ministry of Finance upward trend, we can assume that an increased amount of tax revenue will result from adjustments and higher tax collection of in the area of taxes of personal income and corporate income tax. Prognosis provided by the Ministry of Finance was marked as realistic by all institutes which are members of the committee on fiscal forecasts, except of INFOSTAT, according to which it is a moderately optimistic forecast. Despite the fact the tax environment in Slovakia can be considered as relatively unstable, certain tendencies and developments can be predicted. Based on the analysis of the historical evolution, present state and the assumptions we indicated the issues connected with development of direct taxes in Slovakia.

Keywords: direct taxes, tax system, prognosis

JEL classification: H29

Introduction
According to Kočner and Bulla (2011) taxes are nowadays perceived more negatively as positively, and it is necessary to change the opinion of the people. The tax system should primarily motivate people on the work to stimulate entrepreneurs to investments and doing business, and also contribute to the creation of new jobs. However at present, the tax system is configured differently. It prevents entrepreneurs to operate on and the people discouraged from work. If there is no reform of the tax system, there may be a decline in the economy and also reduction of living standards.

Just due such reasons, taxes become a political tool, since tax increases and the view on negative evolution of business environment in Slovakia are frequent argument of politicians in boosting their preferences prior to the elections.
Direct taxes are an important component of the tax system of the Slovak Republic. Its amount and the options of collection have a direct impact on the redistribution of the state budget and the state budget deficit, the assessment of "health" of public finances and purchasing power of population, the selection of legal form of business, etc.

**Aim of Article**

The aim of the paper is to present current knowledge on the subject of direct taxes in the conditions of Slovak Republic. A part of the paper is view on direct taxes as a part of the tax system and prediction of future development, respectively on alternative scenarios characterizing the possible directions of direct taxes.

**Methodology**

Within the analysis and forecast of the direct taxes were used following scientific methods: analysis, synthesis, deduction, comparison and the observation. In accordance with the principles of scientific work, the contribution structure consists of an introduction, the goal of contribution, methods, results and the discussion, conclusion and references.

**Literature review**

The tax system in general is composed of the set of taxes, the system of institutions for tax administration and the system of tools, methods and techniques which are applied in relation to the tax payers.

Tax system of the Slovak Republic is relatively simple. Tax system consists of direct and indirect taxes. Among direct taxes classify the personal income tax, corporate income tax and the local taxes. The local taxes includes, for example property tax, road tax, dog tax, accommodation tax etc. Among the indirect taxes belong value added tax and excise duties (on alcohol, tobacco, the mineral oil, from electricity, coal and natural gas). In the book by Šostroneková and Kajanová (2009) excise tax like the value added tax is a property ineffective, the payer of excise duty entered it into the accounts on the invoice to the customer and it is paid to financial authority. The tax system of Slovak Republic perceived the present form by the reform in 2004. The main principles of this reform are most notably:

- shift of the tax burden from direct to indirect taxes, i.e. from taxing of production to the taxation of consumption,
- introduction of low tax rates and the elimination of all exceptions, exemptions and special regimes,
- cancellation of progressive income tax by introduction of a flat tax,
- eliminating of the distorting elements of tax policy,
- elimination of double taxation to maximum possible extent.

**Results and Discussion**

**Direct Taxes as a Part of Tax System**

Changes in direct taxes are very unpopular measure, since directly affect all residents. In the context of income taxes Slovak Republic introduced a so-called "Flat tax" for individuals and legal entities (19% rate). In this period, individuals were taxed progressively moving tax rate
(progressive), and the in five bands from 10% to 38%. Legal entities were taxed with the linear rate of 25%. It was cancelled many exceptions and the special rates.

Flat tax is considered within the European Union as a positive result of the tax reform. It has an incentive character, since legal entities are being taxed with the lower tax and the in case of individuals has been reached positive development at a greater part of the population.

Slight stagnation and the decline in tax collection (2009, 2010) caused the incoming economic crisis in 2008 and 2009. At the same time increased the unemployment rate, reduced economic growth, while in 2009 GDP fell. In 2012, there were further adjustments in tax laws. It is the abolition of the "flat tax", while the tax increase should affect only the population of high earners. The higher tax will also apply to higher-paid employees or freelancers. If an employee earns more than € 3,311 monthly, his income above this limit will be taxed at the rate of 25%.

Positive and the significant developments can be observed in the case of change corporate tax income rate. Development of tax rates for legal entities is captured in Table 1 (Kajanová, 2014).

<table>
<thead>
<tr>
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<th>Tax Rates for Legal Entities</th>
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<tbody>
<tr>
<td>1993</td>
<td>45 %</td>
</tr>
<tr>
<td>1994 – 1999</td>
<td>40 %</td>
</tr>
<tr>
<td>2000 – 2001</td>
<td>29 %</td>
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<tr>
<td>2002 – 2003</td>
<td>25 %</td>
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<tr>
<td>2004 – 2012</td>
<td>19 %</td>
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<tr>
<td>2013</td>
<td>23 %</td>
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<tr>
<td>2014</td>
<td>22 %</td>
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</tbody>
</table>

When analysing requirements on the optimum tax system we have used the formulation of RA Musgrave, who defined the requirements for a good tax system is as follows: revenue should be sufficient, the distribution of the tax burden should be uniform, each citizen should pay a fair share, it should be solved the problem of tax incidence, as it is important not only to place of a tax levy, but also its final destination. Taxes should be selected in a way which minimizes interference in economic decisions on efficient markets, tax system should facilitate use of the stabilisation and incremental fiscal policy, should allow low-cost and unified tax administration, for the taxpayer should be understandable, administrative and other expenses should be as low as possible, the tax system should be designed to satisfy the requirements of a fair distribution of the tax burden on efficient use of resources, to the objectives of macroeconomic policy and undemanding administration (Musgrave, 1994).

According to Babčák (2010) modern and functional tax system must implement the principle of fair taxation, the principle of eliminating double taxation, the principle of neutrality of taxes, the principle of simplicity and clarity of taxes, the principle of efficiency and effectiveness of taxation.

General requirements for tax systems which occur in several authors may be presented as follows: it is particular the fairness, economic efficiency, transparency, legal perfection and precision, flexibility, positive impact on taxpayers, fiscal certainty.

The implementation of these requirements into national tax systems will ensure optimum opportunity to build tax system which will meet the requirements of the state and at the same time will also be in accordance with the options of taxpayers. Setting of tools, methods and techniques which will enable the responsible authorities to ensure the tax administration along
the lines of the requirements of both sides is necessary and the essential step to establish an appropriate tax system. It is still a must to strengthen control and revenue collection, where tax systems show the biggest reserves and the gaps.

**Perspectives of direct taxes development**

To forecasting of future state of the tax system in Slovakia are dedicated specialists, experts, academics and researchers, including various prognostic teams. In cooperation with the Ministry of Finance creates the actual forecasts of trends and future developments of public finances. The Ministry of Finance regularly organizes meetings on which are discussed relevant information related to the issue of taxes, public finances and the budget. Those meetings of the Committee on tax projections take place at least once a year, usually 3 times a year. In extreme cases, may also take place a special meeting.

Slovak Ministry of Finance in cooperation with the Statistical Office and the Financial Policy Institute focuses on medium-term forecasts. The main areas of interest are expected tax revenues and contributions to social and health insurance systems. The Ministry of Finance and Financial Policy Institute are not directly focused on predicting the evolution of tax rates; they deal with the amount of income paid as taxes to the budget. Interest rate changes, we may assume, depending on the above forecasts. Together they create medium-term forecasts focused on the macroeconomic development and taxes, which constitute the starting point for the creation of the actual public government budget. These projections are targeted on actual year and the three years subsequent straight after.

The actual methodology of preparation projections consists of multiple phases. At the very beginning it is necessary to estimate the macroeconomic indicators and indicators such as gross domestic product (GDP) at current and constant prices, its structure and usage, additionally foreign trade, balance of payments, the expected inflation rate etc. These important macroeconomic projections are the basis of tax projections to estimate government revenue (Ministry of Finance, 2015). The formulas for evaluating prognosis (optimistic, realistic or conservative) are the following (Ministry of Finance, 2015):

\[
O_t = \frac{P(I)_t - P(MF)_t}{P(MF)_t} \times 100
\]

\[
O_{WAVG} = \frac{\sum_{t=1}^{n} w_t \cdot O_t}{\sum_{t=1}^{n} w_t}
\]

where:
- Q ............ variation in year t,
- P (I) t ....... institution prognosis in the year t
- P (MF) t .... MoF forecasts in the year t
- \(O_{WAVG}\) ...... the weighted average deviation of prognosis between institution and forecast of MoF
- \(w_t\) ........... weight corresponding to year t
- \(t \ldots 1\) represents the current year, \(t = 1,2,3,4\)
The forecast is considered conservative if OWAVG (final average weighted deviation) is higher than 1, optimistic if OWAVG is lower than -1, and in the case the OWAVG is in the range <-1, 1>, it is a realistic forecast. Prognosis of tax revenues and social contributions of public administration on the cash principle is captured in Table 2 (Ministerstvo financií SR. 2015).

Financial Policy Institute publishes prognosis in the standard form according to the European methodology ESA2010, which is harmonized, internationally comparable framework for the creation of national accounts and for a detailed description of the economy. It is applied from September 2014. The data from this European system are subsequently stored in the Eurostat database, where are evaluated and compared with the other EU Member States (Statistical Office, 2015).

The total amount of direct taxes is also affected by such factors as positive reactions on reduced rates of income tax, the fact that revenue from road tax from 1st January 2015 belongs to national budget instead to the budget of the higher territorial units, the amount the license fee the opening of the second pillar and others.

Table 2: Prognosis of Tax Revenues and Social Contributions

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</thead>
<tbody>
<tr>
<td>Income taxes, VAT and capital gains tax</td>
<td>4 022 321</td>
<td>4 051 058</td>
<td>4 538 866</td>
<td>4 907 046</td>
<td>5 078 879</td>
<td>5 443 902</td>
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<tr>
<td>Personal Income Tax</td>
<td>1 846 812</td>
<td>1 964 716</td>
<td>2 097 214</td>
<td>2 242 473</td>
<td>2 378 413</td>
<td>2 549 100</td>
</tr>
<tr>
<td>Tax of Employment Income</td>
<td>1 767 100</td>
<td>1 882 044</td>
<td>1 999 371</td>
<td>2 134 595</td>
<td>2 264 202</td>
<td>2 429 276</td>
</tr>
<tr>
<td>TEI from business</td>
<td>79 712</td>
<td>82 671</td>
<td>97 843</td>
<td>107 878</td>
<td>114 211</td>
<td>119 824</td>
</tr>
<tr>
<td>- to state budget</td>
<td>212 967</td>
<td>238 392</td>
<td>65 057</td>
<td>53 380</td>
<td>62 763</td>
<td></td>
</tr>
<tr>
<td>- to municipalities</td>
<td>1 223 984</td>
<td>1 301 088</td>
<td>1 444 881</td>
<td>1 525 839</td>
<td>1 630 141</td>
<td>1 743 235</td>
</tr>
<tr>
<td>- to higher territorial units</td>
<td>409 861</td>
<td>425 236</td>
<td>613 818</td>
<td>651 577</td>
<td>694 892</td>
<td>743 102</td>
</tr>
<tr>
<td>Corporate income tax</td>
<td>1 997 725</td>
<td>1 911 281</td>
<td>2 282 780</td>
<td>2 495 726</td>
<td>2 522 657</td>
<td>2 707 525</td>
</tr>
<tr>
<td>Withholding Income tax</td>
<td>177 784</td>
<td>175 062</td>
<td>187 647</td>
<td>197 809</td>
<td>187 277</td>
<td></td>
</tr>
<tr>
<td>Goods and service taxes</td>
<td>6 699 520</td>
<td>6 912 223</td>
<td>7 199 656</td>
<td>7 456 375</td>
<td>7 714 592</td>
<td>8 034 573</td>
</tr>
<tr>
<td>International trade and financial operations taxes</td>
<td>27 553</td>
<td>31 584</td>
<td>31 303</td>
<td>26 410</td>
<td>28 034</td>
<td>39 974</td>
</tr>
<tr>
<td>Local taxes</td>
<td>634 600</td>
<td>654 924</td>
<td>681 524</td>
<td>689 387</td>
<td>714 248</td>
<td>742 608</td>
</tr>
<tr>
<td>Real estate tax</td>
<td>316 790</td>
<td>324 295</td>
<td>328 916</td>
<td>336 806</td>
<td>346 507</td>
<td>358 945</td>
</tr>
<tr>
<td>Specific service taxes</td>
<td>177 710</td>
<td>178 750</td>
<td>193 654</td>
<td>193 355</td>
<td>203 927</td>
<td>215 515</td>
</tr>
<tr>
<td>Road tax</td>
<td>140 100</td>
<td>151 879</td>
<td>168 654</td>
<td>159 226</td>
<td>163 814</td>
<td>168 148</td>
</tr>
<tr>
<td>- to higher territorial units</td>
<td>140 100</td>
<td>151 879</td>
<td>159 226</td>
<td>163 814</td>
<td>168 148</td>
<td></td>
</tr>
<tr>
<td>- to state budget</td>
<td>0</td>
<td>155 061</td>
<td>163 814</td>
<td>168 148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other taxes</td>
<td>375 957</td>
<td>383 984</td>
<td>280 007</td>
<td>279 831</td>
<td>107 491</td>
<td>130 309</td>
</tr>
<tr>
<td>Funds of social and health insurance</td>
<td>8 301 557</td>
<td>8 518 859</td>
<td>8 965 528</td>
<td>9 029 247</td>
<td>9 469 889</td>
<td>9 988 749</td>
</tr>
<tr>
<td>Social Insurance</td>
<td>5 690 442</td>
<td>5 748 913</td>
<td>6 257 885</td>
<td>6 212 780</td>
<td>6 494 076</td>
<td>6 835 816</td>
</tr>
<tr>
<td>Health insurance</td>
<td>2 611 115</td>
<td>2 769 946</td>
<td>2 707 643</td>
<td>2 816 467</td>
<td>2 975 813</td>
<td>3 152 933</td>
</tr>
<tr>
<td>Public sector tax revenues total</td>
<td>11 759 952</td>
<td>12 033 772</td>
<td>12 731 357</td>
<td>13 369 049</td>
<td>13 643 244</td>
<td>14 381 134</td>
</tr>
<tr>
<td>Tax revenues of state budget</td>
<td>9 115 747</td>
<td>9 268 838</td>
<td>9 866 299</td>
<td>10 371 758</td>
<td>10 660 410</td>
<td>11 190 159</td>
</tr>
<tr>
<td>State financial assets</td>
<td>303 126</td>
<td>311 273</td>
<td>209 091</td>
<td>209 186</td>
<td>37 093</td>
<td>60 254</td>
</tr>
</tbody>
</table>
### Tax Revenues

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax revenues municipalities</td>
<td>1,718,960</td>
<td>1,804,578</td>
<td>1,958,197</td>
<td>2,056,470</td>
<td>2,181,069</td>
<td>2,318,217</td>
</tr>
<tr>
<td>Tax revenues of Higher</td>
<td>549,961</td>
<td>577,114</td>
<td>627,411</td>
<td>651,577</td>
<td>694,892</td>
<td>743,102</td>
</tr>
<tr>
<td>territorial units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax revenues of RTVS</td>
<td>71,322</td>
<td>71,110</td>
<td>69,474</td>
<td>69,129</td>
<td>68,800</td>
<td>68,367</td>
</tr>
<tr>
<td>Environmental fund</td>
<td>836</td>
<td>859</td>
<td>884</td>
<td>929</td>
<td>980</td>
<td>1,036</td>
</tr>
<tr>
<td>FSZP total</td>
<td>8,301,557</td>
<td>8,518,859</td>
<td>8,965,528</td>
<td>9,029,247</td>
<td>9,469,889</td>
<td>9,988,749</td>
</tr>
<tr>
<td>Tax revenues and</td>
<td>20,061,509</td>
<td>20,552,631</td>
<td>21,696,885</td>
<td>22,388,296</td>
<td>23,113,133</td>
<td>24,369,883</td>
</tr>
<tr>
<td>revenues of FSZP total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compared with 2013, tax revenue in their total value increased in 2014 by 2.45%. In subsequent years, also assumes a slight increase in revenues in the range of three to five percent.

Personal income tax shows a slight upward trend. Similarly while watching the percent changes in the composition of total tax revenues, we can observe an upward trend for both types of income taxes. Their share with respect to total government revenue tax increases.

Whereas the tax revenue projections has according to the Ministry of Finance upward trend, we can assume that an increased amount of tax revenues will result from adjustments and higher collections of taxes on personal income tax and corporate tax. In the case of income taxes are obviously going to act on income from employment and business. The additional increase in tax revenues will has to be ensured from other fields, as cannot be expected in the present circumstances increase the number of business entities - small businesses and thus not increased the volume of funds from personal income taxes.

An open option appears still insufficient levying of corporate income tax. The increased number of tax audits, higher collection of unpaid taxes and control of the leakage of funds to the so-called "tax havens" are also several options to ensure higher collection of the tax.

The situation after the election in 2016 continues to stabilize. The current Slovak government is expected to cut corporate tax to 21%. The positive impact on the business environment should bring the planned elimination of tax licenses in 2018. Changes in tax rate for individuals are currently not expected. Slightly negative shift occurs in the prediction of a balanced state budget. The projected balanced budget is postponed from 2018 to 2020. Due to the planned changes, which are part of the government program, it is clear that the fulfilment of the program of government will require more funds than originally intended in the state budget for this year, respectively in the long term budgeting.

### Conclusion

The current state of the tax system can be considered as relatively stable, with lower levels sense of justice. Tendencies in tax cuts for individuals and legal entities are given by tax collection, by the government expenditure ratio and the number of social measures which will be the counterpart of the tax liability reduction.

The prognosis provided by the Ministry of Finance was described as realistic by all institutions who are members of the committee on fiscal projections, with the exception of INFOSTAT, by which it is a slightly optimistic forecast. (Ministerstvo financií SR, 2015).

Despite the fact, the tax environment in Slovakia can be considered as relatively unstable; certain tendency of its developments can be predicted. Based on the analysis of the historical
evolution, current state and assumptions we indicated the development of direct taxes issue in Slovakia. We can conclude the tax system is as relatively stable, we do not expect the creation of new taxes rather corrections in the current legislation.

References


Security Issues towards OWNCL OUD

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Abstract
The private cloud storage OWNCL OUD is a safe solution for storing sensitive data, but has some security issues. The first security issue is the security of data core encryption system OWNCL OUD. Previously publicly documented was an issue of less secure kernel of the operating system, when with a commercially available tools was possible to read unencrypted data from the core. The second issue is about the level of Internet security interface system for accessing OWNCL OUD. This approach is not entirely directed to OWNCL OUD and normally requires several other services. The services are often compromised and present danger to the user data. The third issue is the security of data backup storage. Under certain conditions it is possible to restore data from a major change of user privileges. An attacker could obtain a permission and complete access to the stored data. The last issue is the safety of user’s own behavior. There is a possibility that the user adjust OWNCL OUD and greatly reduce the system security, so that the user could always have access to the sensitive data storage - Social engineering. The solution is to operate a system based on the OWNCL OUD safe deployment scenarios. These need to undergo a security management including security risk analysis with penetration testing system.

Key words: OWNCL OUD, cloud, security, SOA, attack

JEL classification: L86

Introduction
The version of ownCloud in Ubuntu’s Universe repositories is old and full of “multiple critical security vulnerabilities.” It’s no secret. The ownCloud project itself asked Ubuntu to remove it so users wouldn’t have vulnerable server software. Ubuntu suggested to ownCloud they should take over maintaining it instead. OwnCloud thought that was ridiculous—they just want to write software and not maintain it in every distribution’s repositories. Ubuntu is finally taking action and uploading an empty package that will disable the vulnerable ownCloud server software on Ubuntu 14.04 systems. But this whole weeks-long ordeal demonstrates a serious weakness with the way Linux software is packaged, distributed, and updated. (‘Ubuntu, ownCloud, and a hidden dark side of Linux software repositories | PCWorld’, n.d.)
Theoretical foundation of Security Issues of OwnCloud

OwnCloud is a suite of client-server software for creating file hosting services and using them. OwnCloud is functionally very similar to the widely used Dropbox, with the primary functional difference being that OwnCloud is free and open-source, and thereby allowing anyone to install and operate it without charge on a private server. It also supports extensions that allow it to work like Google Drive, with online document editing, calendar and contact synchronization, and more. Its openness eschews enforced quotas on storage space or the number of connected clients, instead having hard limits (like on storage space or number of users) defined only by the physical capabilities of the server. (‘Security work going on in ownCloud’, n.d.)

It’s easy to introduce security problems or have a system improperly configured, thus for ownCloud 8.1 they will have a new “Tips & tricks” section giving tips to administrators how to properly configure their instances. This offers advises going from monitoring, performance tuning, over to theming and of course hardening and security guidance. (‘Security work going on in ownCloud’, n.d.)

The research methodology

The paper is mainly used methods of analysis and synthesis. Furthermore, the company uses the method of induction and deduction. In the first phase we have set for ourselves in the work of theoretical framework issues. Then we processed the available resources. We evaluated the information received. In the last phase, we determined conclusion.

Research results

The private cloud storage OWNCL OUD is a safe solution for storing sensitive data, but has some security issues. The first security issue is the security of data core encryption system OWNCL OUD. Previously publicly documented was an issue of less secure kernel of the operating system, when with a commercially available tools was possible to read unencrypted data from the core. The Owncloud web application has an encryption module. I first became aware of it when a press release was published advertising this encryption module containing this: “Imagine you are an IT organization using industry standard AES 256 encryption keys. Let’s say that a vulnerability is found in the algorithm, and you now need to improve your overall security by switching over to RSA-2048, a completely different algorithm and key set. Now, with ownCloud’s modular encryption approach, you can swap out the existing AES 256 encryption with the new RSA algorithm, giving you added security while still enabling seamless access to enterprise-class file sharing and collaboration for all of your end-users.” To anyone knowing anything about crypto this sounds quite weird. AES and RSA are very different algorithms – AES is a symmetric algorithm and RSA is a public key algorithm - and it makes no sense to replace one by the other. Also RSA is much older than AES. This press release has since been removed from the Owncloud webpage, but its content can still be found in this Reuters news article. This and some conversations with Owncloud developers caused me to have a look at this encryption module. (‘Pwncloud – bad crypto in the Owncloud encryption module - Hanno’s blog’, n.d.) First it is important to understand what this encryption module is actually supposed to do and understand the threat scenario. The encryption provides no security
against a malicious server operator, because the encryption happens on the server. The only scenario where this encryption helps is if one has a trusted server that is using an untrusted storage space. (‘Pwncloud – bad crypto in the Owncloud encryption module - Hanno’s blog’, n.d.) The second issue is about the level of Internet security interface system for accessing OWNCLoud. This approach is not entirely directed to OWNCLoud and normally requires several other services. The services are often compromised and present danger to the user data. The third issue is the security of data backup storage. Under certain conditions it is possible to restore data from a major change of user privileges. An attacker could obtain a permission and complete access to the stored data. The last issue is the safety of user’s own behavior. There is a possibility that the user adjust OWNCLoud and greatly reduce the system security, so that the user could always have access to the sensitive data storage - Social engineering. Typically a Cross-Site Scripting (XSS) vulnerability is seen as a "low priority" issue or something that has minimal security impact. Often times this mentality results in delayed patches for XSS issues because there are "higher priorities" that need to be dealt with. This is a dangerous mindset because often times compromising servers or the privacy of users is much more complicated than using a single exploit. Hacking is about using creativity and with enough of it even a "minor" XSS vulnerability will pave the way for devastating consequences. (‘OwnCloud 6.0.0a: When a XSS Vulnerability Gives a Shell on the Server! n00b r00t’, n.d.)

**Conclusion**

The solution is to operate a system based on the OWNCLoud safe deployment scenarios. These need to undergo a security management including security risk analysis with penetration testing system. Knowledge of security issues of ownCloud is essential for safe operation of the system. For a few selected cases we have described the most common security issues. Defense is the only constantly updated system ownCloud.

**References**


Secure Sandbox on Openstack

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Abstract
The system allows for creation of OpenStack sandbox solutions. This sandbox solutions are an advantage for the company in several scenarios. One of the scenarios is to use the sandbox for testing the security of new deployment of IS / IT solutions of the company. Deploying of any new applications in the company is a certain security risk. The deployment of applications to the full operation level without functional verification of security in company safety policy is not entirely possible. Execution of penetration tests by OWASP methodology for full operation of the system is a too big risk for the company. OpenStack sandbox system is a secure solution for testing your application penetration testing. It is quite easy to run as an image of the existing deployed systems and run them over security analysis with a complete analysis of system performance and data flow infrastructure. This solution is fully sufficient to perform a security audit on the methodology OWASP.

Key words: OPENSTACK, cloud, security, SOA, attack

JEL classification: L86

Introduction
Creating a sandbox environment using VirtualBox (or VMware Fusion) and Vagrant allows us to discover and experiment with the OpenStack services. VirtualBox gives us the ability to spin up virtual machines and networks without affecting the rest of our working environment, and is freely available at http://www.virtualbox.org for Windows, Mac OS X, and Linux. Vagrant allows us to automate this task, meaning we can spend less time creating our test environments and more time using OpenStack. This test environment can then be used for the rest of the OpenStack Cloud Computing Cookbook. It is assumed that the computer you will be using to run your test environment has enough processing power that has hardware virtualization support (for example, Intel VT-X and AMD-V support) with at least 8 GB RAM. Remember we’re creating a virtual machine that itself will be used to spin up virtual machines, so the more RAM you have, the better. (‘Creating a Sandbox Environment for the OpenStack Cloud Computing Cookbook | OpenStack Cloud Computing Cookbook’, n.d.)

Theoretical foundation of Openstack
OpenStack is a set of software tools for building and managing cloud computing platforms for public and private clouds. Backed by some of the biggest companies in software development and hosting, as well as thousands of individual community members, many think that OpenStack is the future of cloud computing. OpenStack is managed by the OpenStack Foundation, a non-profit that oversees both development and community-building around the project. (‘What is OpenStack? | Opensource.com’, n.d.) OpenStack lets users deploy virtual machines and other instances that handle different tasks for managing a cloud environment on the fly. It makes horizontal scaling easy, which means that tasks that benefit from running
concurrently can easily serve more or fewer users on the fly by just spinning up more instances. For example, a mobile application that needs to communicate with a remote server might be able to divide the work of communicating with each user across many different instances, all communicating with one another but scaling quickly and easily as the application gains more users. And most importantly, OpenStack is open source software, which means that anyone who chooses to can access the source code, make any changes or modifications they need, and freely share these changes back out to the community at large. It also means that OpenStack has the benefit of thousands of developers all over the world working in tandem to develop the strongest, most robust, and most secure product that they can. (‘What is OpenStack? | Opensource.com’, n.d.)

**The research methodology**

The paper is mainly used methods of analysis and synthesis. Furthermore, the company uses the method of induction and deduction. In the first phase we have set for ourselves in the work of theoretical framework issues. Then we processed the available resources. We evaluated the information received. In the last phase, we determined conclusion.

**Research results**

The system allows for creation of OpenStack sandbox solutions. This sandbox solutions are an advantage for the company in several scenarios. One of the scenarios is to use the sandbox for testing the security of new deployment of IS / IT solutions of the company. Deploying of any new applications in the company is a certain security risk. The deployment of applications to the full operation level without functional verification of security in company safety policy is not entirely possible. Execution of penetration tests by OWASP methodology for full operation of the system is a too big risk for the company.

**Conclusion**

OpenStack sandbox system is a secure solution for testing your application penetration testing. It is quite easy to run as an image of the existing deployed systems and run them over security analysis with a complete analysis of system performance and data flow infrastructure. This solution is fully sufficient to perform a security audit on the methodology OWASP

**References**


Possible aspects of healthcare informatization

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Abstract
The main idea of eHealth is to provide the right information at the right time in the right form at the right place at all stages and processes of care for the health of citizens. The basic technology used to store data in such a system will be cloud. Implementation of cloud and mobile technologies to digitize healthcare and registers directly affect many processes in health care. Nine principles for building a culture of safety contained in the OECD Guidelines for the security of information systems and computer networks is its content are complementary and should be read as a whole. To ensure information security is necessary to avoid the risks that may have a negative impact on the smooth running of IT systems. Suitable for example for information security in Slovakia can be regarded as a procedure of the German Security Agency BSI.

Key words: eHealth, OECD, BSI, cloud, security

JEL classification: L86

Introduction
Everybody talks about e-health these days, but few people have come up with a clear definition of this comparatively new term. The term eHealth was apparently first used by industry leaders and marketing people rather than academics. They created and used this term in line with other "e-words" such as e-commerce, e-business, e-solutions, and so on, in an attempt to convey the promises, principles, excitement (and hype) around e-commerce (electronic commerce) to the health arena, and to give an account of the new possibilities the Internet is opening up to the area of health care. Intel, for example, referred to e-health as "a concerted effort undertaken by leaders in health care and hi-tech industries to fully harness the benefits available through convergence of the Internet and health care." Because the Internet created new opportunities and challenges to the traditional health care information technology industry, the use of a new term to address these issues seemed appropriate. These "new" challenges for the health care information technology industry were mainly (1) the capability of consumers to interact with their systems online (B2C = "business to consumer"); (2) improved possibilities for institution-to-institution transmissions of data (B2B = "business to business"); (3) new possibilities for peer-to-peer communication of consumers (C2C = "consumer to consumer"). (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)
Theoretical foundation of The 10 e's in "e-health"

- Efficiency - one of the promises of e-health is to increase efficiency in health care, thereby decreasing costs. One possible way of decreasing costs would be by avoiding duplicative or unnecessary diagnostic or therapeutic interventions, through enhanced communication possibilities between health care establishments, and through patient involvement. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Enhancing quality of care - increasing efficiency involves not only reducing costs, but at the same time improving quality. E-health may enhance the quality of health care for example by allowing comparisons between different providers, involving consumers as additional power for quality assurance, and directing patient streams to the best quality providers. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Evidence based - e-health interventions should be evidence-based in a sense that their effectiveness and efficiency should not be assumed but proven by rigorous scientific evaluation. Much work still has to be done in this area. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Empowerment of consumers and patients - by making the knowledge bases of medicine and personal electronic records accessible to consumers over the Internet, e-health opens new avenues for patient-centered medicine, and enables evidence-based patient choice. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Encouragement of a new relationship between the patient and health professional, towards a true partnership, where decisions are made in a shared manner. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Education of physicians through online sources (continuing medical education) and consumers (health education, tailored preventive information for consumers) (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Enabling information exchange and communication in a standardized way between health care establishments. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Extending the scope of health care beyond its conventional boundaries. This is meant in both a geographical sense as well as in a conceptual sense. e-health enables consumers to easily obtain health services online from global providers. These services can range from simple advice to more complex interventions or products such pharmaceuticals. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)
- Ethics - e-health involves new forms of patient-physician interaction and poses new challenges and threats to ethical issues such as online professional practice, informed consent, privacy and equity issues. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

- Equity - to make health care more equitable is one of the promises of e-health, but at the same time there is a considerable threat that e-health may deepen the gap between the "haves" and "have-nots". People, who do not have the money, skills, and access to computers and networks, cannot use computers effectively. As a result, these patient populations (which would actually benefit the most from health information) are those who are the least likely to benefit from advances in information technology, unless political measures ensure equitable access for all. The digital divide currently runs between rural vs. urban populations, rich vs. poor, young vs. old, male vs. female people, and between neglected/rare vs. common diseases. (‘JMIR-What Is eHealth (3): A Systematic Review of Published Definitions | Oh | Journal of Medical Internet Research’, n.d.)

The research methodology

The paper is mainly used methods of analysis and synthesis. Furthermore, the company uses the method of induction and deduction. In the first phase we have set for ourselves in the work of theoretical framework issues. Then we processed the available resources. We evaluated the information received. In the last phase, we determined conclusion.

Research results

The main idea of eHealth is to provide the right information at the right time in the right form at the right place at all stages and processes of care for the health of citizens. The basic technology used to store data in such a system will be cloud. Implementation of cloud and mobile technologies to digitize healthcare and registers directly affect many processes in health care. Nine principles for building a culture of safety contained in the OECD Guidelines for the security of information systems and computer networks is its content are complementary and should be read as a whole. To ensure information security is necessary to avoid the risks that may have a negative impact on the smooth running of IT systems. Suitable for example for information security in Slovakia can be regarded as a procedure of the German Security Agency BSI.

Conclusion

Knowledge of the socio-economic performance of eHealth is limited, and findings from evaluations are often challenging to transfer to other settings. Socio-economic evaluations of some narrow types of eHealth can rely on health economic methodologies, but larger scale eHealth may have too many variables, and tortuous, intangible cause and effect links may need a wider approach.

References


Application of the rules of BYOD in the enterprise

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Abstract
The implementation rules of BYOD in the company is dependent on several factors. The main reason for the introduction of BYOD is its necessity for employees to do their business. Secondly, BYOD is implemented in companies for customers’s use. The third factor is the existing infrastructure of the company and the management of security incidents. Security rules for BYOD must implicitly assume that the connection, during its whole duration, is a breach of infrastructure’s security. The safety rules must be set to identify any BYOD as a hostile object and this will significantly restrict the possibility of carrying out attacks on the infrastructure. Serious limitation of rights ultimately brings a decrease in the use of BYOD. Free use of BYOD brings a high degree of security incidents. Two separate infrastructures, one for BYOD, and the second for the enterprise, will be connected through the two aforementioned principles.

Key words: BYOD, security, infrastructure, Wifi, SOA

JEL classification: L86

Introduction
Implementing new technology is an investment. Almost always it is necessary to pay for technology and services for the needs of company and employees. Some companies are able to combine technology and safety, so that it all worked well together. In contrast to these developments, BYOD is something that has come to life mostly alone. Of course, the large number of hardware and software vendor now benefit from this trend, but the real problem - and advantage - is that people bring their own hardware to work. Whether companies like this trend or not - has to deal with it. BYOD benefits are obvious - the company save on the purchase of hardware and employees are happier with such devices they want. (‘Understanding the scope of BYOD Threats -Kaspersky Business | Blog on Kaspersky Lab business’, n.d.)

Theoretical foundation of BYOD
Bring-Your-Own-Device (BYOD) is not a single idea or way of working. Rather it represents a broad spectrum of devices, capabilities and responses indicative of the evolving role of technology in the relationship between work and personal lives. Each device represents a different level of complexity when incorporating this into an enterprise IT environment. (‘deloitte-uk-understanding-the-bring-your-own-device landscape.pdf’, n.d.). Bring-Your-Own-Device (BYOD) is the use of employee-owned devices to access enterprise content or networks. It is an IT trend and a broader movement that impacts the way enterprises invest in assets, empower employees and attract and retain talent. The growth and potential
The research methodology
In this work we used the analysis and synthesis of knowledge. Spracovanei results for practical security penetration test, we used the method of induction and deduction. To test the hypothesis, we used H1 practical test in terms of methodology OWASP (‘OWASP’, n.d.). The need to conduct the test, we used Fing application for iOS available in free version. We join in the city of Presov in one store cars at the free WiFi network for the customer and we were looking for network structure. We then ran the test free port with the intention of detecting the functionality of the device and assess the degree of security.

H1 hypothesis claims, that the use of BYOD in the company is not adequately secured. To verify the argument, it is necessary to convert the numbers of tests in a statistically significant number. For the purposes of our article, however, we test the first randomly selected company and test its safety.

Research results
Upon arrival to a company, where we test, we launched the smartphone iOS app FING. But first we select the first net Wifi which was free. Had clearly identifying the name of customers. In the application we have selected FING reloading network. It displays all devices within the network segment. For each record is assigned an IP address, MAC address, and name. The network was seen as CISCO routers and internal computer network company. They were easily identified under the names SERVICE, Cashier 1, Cashier 2, accounting. Clicking on each line record opens the possibility SERVICES SCAN, PING DEVICE and others in this case uninteresting Applications. A common sight was visible, a technician with laptops moving in space. It is likely that they are connected to the same network. Other tests, however, we have not done, they would be through framework legislation. In this state diagnosis by OWASP has done analysis of network structures. In the case of company computers it is likely that using WINDOWS OS - accounting IS / IT in Slovakia are programmed for Windows. On this basis, it can be considered for further testing in a Windows environment. The company network were visible several WiFi. Among them was also found encrypted. The problem is that all are within the same network segment. The second problem is that the customer WiFi connection point is not encrypted, without a password, that is free. The attacker could transfer a minimum of DDOS attack for the disablement of the internal network, you are enough to just this scope of knowledge.

Conclusion
Based on a simple penetration test is the result of information about the structure of the company network. This information may be significantly exploited to attack. The problem is the lack of network security and network structure is incorrect. In one segment of the network devices are used company and free access to BYOD. In practice, the unidentified devices with free access
to the company network, the designated any security rules. A solution would be the introduction of two network segments and consistent firewall security rules at the beginning.

H1 hypothesis claims, that the use of BYOD in the company is not adequately secured. This hypothesis was confirmed at randomly selected test company. A simple test was revealed the structure of the entire company network, a significant violation of safety rules.

Free use of BYOD brings a high degree of security incidents. Two separate infrastructures, one for BYOD, and the second for the enterprise, will be connected through the two aforementioned principles.

References


THE INFLUENCE OF MODERN SPORTS INDUSTRY ON PEOPLE’S LIFESTYLE

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ABSTRACT

Latest theories of sport sociology give the impression to suffer from a lack of studies dealing with big changes in modern society with relation to sport. The modern sports industry now influences more people in their lifestyle choices than 20 years earlier.

Today world is more complicated than it was before; new technologies changed existed industries and created new ones, which caused big changes in people’s lifestyle.

We can find many successful applications of sociological techniques in the field of sport but almost no conception is found at the level of a general theory. One of the reasons can be seen in the understanding of the term sport. Let us try to look at sport in a similar way, not by its common definition, but by starting with some definitions of human culture. It will help us to discover the full range of activities associated with the term sport.

In the center of those changes was internet which changed the way people receive or give information. Despite all those changes, sport continues to play significant role in people’s life, but all those changes and new technologies touch sport industry and made some changes there.

Key words: sports, industrial revolution, social media, lifestyle

JEL classification:

Connection between people’s lifestyle with their sport activities

If we use a modern definition, lifestyle is the sum of a subject’s significant activities, relationships, and customary practices. In a very general definition, the subject can be a person or a group. Traditional societies had a clear structure of lifestyles based on some traditional legitimizations (“duties”) and the stratification within the society. Modern society seems to be rather fuzzy. Duty has lost its significant role in human life. The decision how to spend our leisure time depends on us. Our imagination is restricted only by our capital. Modernity produces many patterns of lifestyles. Modern people seem to stand in front of shop windows trying to find and then buy their identity, but the aim of the global market is a permanent and never-ending proposal of lucky lifestyles. It is very difficult to find our identity if we have no certainty whether our decision is right. In addition, we cannot refer to tradition or a well-arranged society if the modern way of life has been chosen.

The word modern is used for the society coming after the Industrial Revolution. Many traditional patterns of communication, values, and norms were replaced by formal communication, new norms (with rational-legal legitimization) and new values that are well understood for a market-conducted space (effort, competition, liberalism). The global market controls the activities of all people and evaluates each effort. Working time is perfectly delimitated by the “rhythm of machines” and spare time is available to everyone.
As we all consider, changes in people’s lifestyle are connected with sport activities, mostly in recent years. According to 2013 SFIA Topline Participation Report, from 2011 to 2013 in US number of “inactives” (those who don’t take part in any active sport) increased by almost 2 millions. But if we would consider participation in particular sports, results would be different in each case. For example, from 2009 to 2013 number of people who were members of fitness and health clubs increased in 15% and number of people who running grew almost in 30% during same period. Interest in other sports was growing slower, stay stable or slowing down.

There is a global society with a significant role for the market. People often engage in communications based on formal rules. Formal aspects forma good framework for non-intervene fractions of human life. Leisure time is such a fraction—time devoted to individual happiness. Where to obtain an inspiration for leisure-time living is in question. There are two possibilities. The first one is a return to tradition. The other possibility is to consume offered lifestyles. An adopted (pseudo-)tradition could be included here but the main difference is that a consumer does not need to seek an explanation. This way of life is a complete “parcel” and no position must be created in a consumer’s life before consumption. The term postmodern society seems to be suitable for the point when quality of life and personal happiness became primary values in modernity.

Modernity is a convenient time for the complete development of a human being. This development is presented as the right of all human beings. Focusing on man’s important features of his/her life, a human being seems to be homo faber (“creator”) and homo ludens (“player”). These are the only chances to find personal identity. However, we do not consider these two aspects as being disjunctive. In the postmodern epoch (of the Western type), the quality of life considers the combination of all life activities; working time and spare time are included. It might be a good distinction between developed and developing societies to compare leisure classes. Leisure time forms the lifestyles of their members and it is the main space for consumption.

**Sport and game**

Sport has a special position in human life. Each society brings its own meaning of all activities to this word. The main and most general dimensions of sport are

- physical training
- games
- contests

Homo Faber improves things that can be improved. Each society is based on hierarchies and competitions. A competition is the only way to demonstrate the success of an improvement and is the essence of modern sport as well as the hero cult.

The other part of human nature is the homo ludens within us. Although sport seems to be equal to a game, it is a common misunderstanding that originates from the definition of the term sport. The reason we do not accept the equivalency (sport≡game) is recognized from our three-dimensional conception of sport and our tendency to emphasize the role of an
individual improvement conducted by values of society. However, game is a good model for asocial life. Many roles following man-made rules are played. So, a game is considered to be asset of behavioral patterns that solve symbolic situations. The most important difference between a social life and a game is that games should be chosen of one’s own accord. Players “live” in a communicable framework, which is well-known. Roles are much clearer than in everyday life. The playing of a game is a step into a new “reality”. No matter how strange the game is, it is well-arranged and more fun than every day communication. There is also a new role for games in a modern society. That is, as a commodity for consumption promising a new identity for the consumer.

**Technical innovations and support in sport industry**

Above was proved that in recent period lifestyle of more people was influenced by sport industry which was reflected in grooving sale of their product. Below it will be described which changes in technologies and marketing allowed to achieve such growth and involve more people into more intensive engagement with sport sphere.

The biggest changes in marketing tools during last 20 years refer to occurring of digital marketing. As in the past, marketing still use people’s wishes and aspirations, but now it combined with technical side of data, digital engineering and analytics. There are three areas of marketing which have been transformed by digital: speed, relevance and reach of campaigns. It dramatically increase speed of all processes and reactions; messages can be targeted with a laser focus to very specific groups offering them relevant content; huge variety of different ways that customers access media, whether through Facebook, YouTube, news websites, via mobile or tablet apps.

Among main marketing tools which are used online we can highlight social media, blogging, search engine optimization (SEO), pay per click management, branding, content marketing, video marketing and app creation.

**Conclusion**

In the previous sections we introduced the basic notions used in our picture of sport as cultural phenomenon. At this general level, we have to understand all sport activities in the basic dimensions mentioned above: physical training, game, and contest. We tried to present the hero cult as an integral part of each specific culture. Then we moved to a modern and postmodern society of the Western type. Changes in modernity were introduced with an emphasis on the growing importance of leisure time in modern lifestyles.

Now let us look at sport within the framework of culture (please see the figure below). There are some aspects nested in a culture, in particular, the hero cult, self-improvement, and game. They form people’s approach to sport activities of all types. We believe this complex of activities has a very strong influence on human lifestyle and it is not important whether we participate in an active way or not. Any particular manifestation of these cultural-based aspects can differ culture by culture, but the general picture of sport should remain the
same. The significance of sport in a human culture is based on the nested aspects while its special role in modernity is associated with leisure time.

We focused on the changes in societies from a temporal view (traditional—modern—“postmodern”), which is the main interest of general sociology, and wanted to show how the unchanged picture of sport could be seen in a global (“postmodern”) society. This brings us to the understanding that sport is one of the key social institutions. Sport has its own firm position in human life and its relationship with other institutions can be studied. From this point of view, sport can bridge the gap between cultures or societies which might differ in other institutions. I believe this could be one way of understanding how sport can be used in an integration process. At the very beginning, we mentioned the comparison of sport and religion as a provocation. Let me use it once more in connection with the term diffusion. Sport seems to be more readily available for diffusion into other cultures because of the following reasons:

- Sport performances are easily understandable.
- Hero cult and self-improvement are expected to be nested in every culture.
- Game is a good space for the transmission of some social values and norms.
- If modern society of the Western type is a framework, then: Sport does not retard innovations and it is not incompatible with the values of modernity.

Taking on account all information above, we can assume that sport industry influence more people in their sport-connected lifestyle activities. Even if now less people doing physical activities than before, still data from growing revenue proves that people spend more money on lifestyle activities connected with sport thus industries connected with sport influence more people and degree of influence is higher.
References
Carl Bialik, More People Are Running; Fewer Are Playing Bar Sports, FiveThirtyEight, 2013

David Benady, How technology is changing marketing, The Guardian, 2014

Global sports market - total revenue from 2006 to 2015, Statista

Greg Lockley, How eSports is becoming a legitimate sport, MCV, 2014

Kajanová, J. (2015), Efficiency of Food Enterprises in Slovak Republic. In: Globalizácia a jej sociálno-ekonomické dôsledky, Žilina


Premier League in record £5.14bn TV rights deal, BBC, 10.02.2015

Rexly Penaflorida, Beats, Apple Deal Means $30M Payday for LeBron James, PCMag, 2014

Sameer Arshad, Which Football Clubs Sold Most Shirts in 2014 Season TSM Plug, 2014

Samuel Arbesman, Is our tech making the world too complex?, Aeon, 2014

