

THE SIGNIFICANCE OF THE SOCIAL NETWORKING SITE FACEBOOK AS A MARKETING COMMUNICATION CHANNEL

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Abstract

The aim of this article is to describe specific aspects of social networking sites as a phenomenon of modern days. Regarding the assessment of this topic, the theoretical solutions to problems related to social networks and social media are summarised in this article. It is mainly focused on the social networking site Facebook as it is a key marketing communication channel used online by employees within marketing field. Another aim of this article is to point out the current state of the matters as well as potential difficulties.

Key words Marketing, Internet, Social Media, Facebook

1. INTRODUCTION

Social networking sites such as Facebook which became a global communication platform form a part of the modern social media. These days are characterised by the fast development of technologies and communication tools, which means new issues arising in marketing field as the reaction to the changes in the ways of communication or activities done during the free time of the target groups in relation to the new communication channels.

During the last few years, social networks have been in a significant way indicating trends in communication and online marketing almost worldwide. This system which is with the use of technologies and human thinking continuously evolving and at the same time makes an interpersonal communication easier represents a relevant place and opportunity for the implementation of many various marketing strategies.

2. THEORETICAL BASIS

Online communication is closely related with other disciplines within marketing communication mix . This is also displayed by the high number of the functions that it usually performs. With the use of the Internet, it is possible to introduce new categories of the products, raise awareness of the existing products (or labels), improve the image and reputation of the brand and communicate with target groups. (Karlíček , 2011)

Social media form a place where it is possible for people to meet, form their circle of friends or to join any community with specific interests. Social networking sites are also called socialising networks or simply communities. These networks represent a way in which it is possible to influence certain group of people to accept, change or abandon certain thoughts, behaviours, practices or approaches with the use of these media. (Janouch, 2011)

Author Sterne (2010) has another point of view, as he understands the term "social media" as everything that would allow any person to communicate with any other person- or in another words, content generated by users and distributed by internet tools that are easily accessible.

It is possible to complete the stated definitions with an opinion of author Stern (2011), who claims that social media represent everything that allows any person to communicate with any other person- or in another words, content generated by users and distributed by internet tools which are easily accessible.

We have the same point of view as the author Janouch (2011, p. 210), as he in our opinion describes the nature of social media and thus social networking sites in the best way: "Social media are online media where is the content co-created and shared by users. Social media are constantly changing as their content is changing (increasing) and also because of a creation of a large number of functions. Social media enable marketers to directly find out the requirements of the customers, what are their attitudes towards the brand or a company, what do they complain about, etc."

As we can conclude from the above mentioned fact, social media networks represent online platform where users share their thoughts, personal information, photos, videos or quotes that they find interesting. They are forming groups that share the same ideas, visions, opinions and encourage one specific goal. This results in social relations, that can also be used for marketing purposes (Success Magazine, 2010). This opinion is supported by the author Bednář (2001), who described the following basic characteristics of social networking sites in his publication:

- Majority of the content is created by users themselves,
- the main basis is formed by the relations between users, their mutual communication, comments, links and reviews,
- server operators do interact with the users and enter the service as minimally as possible.

It is indubitable that benefits coming with the use of social media and their role in marketing form an important part of internet business. It is therefore important to understand the potential of social networking sites in order to achieve marketing goals, that are best defined by the online marketing agency Krea (2011):

- Building a good reputation and Public Relations,
- Forming community of fans, customers and supporters,
- Communication with customers,
- Providing a space for publishing and sharing content,
- Creation of advertising campaigns with focus on the target groups.

Treadaway (2011) in his publication uses an interesting way to define the rules of the concept of social media, which in our opinion clearly summarises the discussed topic:

- Although social media are based on the bonds of friendship, the meaning of this term is now quite vague. The profiles that can be seen by people, companies or used by brands in different ways are similarly benevolent,
 - Social media represent the preferred method of mutual communication among young people,
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- The more active is the customer online, the more likely it is that they are involved in various social networks . These people can often influence their circle of friends and have an impact on the opinions of their social community,
- As soon as any information appears on the social network, it is there and therefore can not be stopped,
- Social media work best if they are applied together with the modern methods of internet marketing. It is necessary to be aware of the bigger picture when making strategies,
- The rules are still being created and etiquette of social media is relatively fresh.

As social media and therefore also social networking sites have their undeniable benefits and rules, they also have important functions from a marketing point of view, which are defined by author Bednář (2011) as:

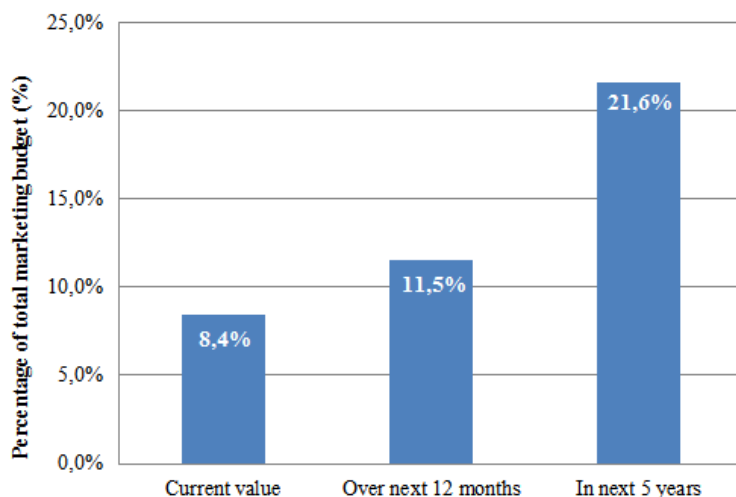
- Spreading information about the brand: creating general awareness and introducing people to the brand that was unfamiliar until now,
- Pre-promotion of product or service- this includes advertising of a product or service as well as making people familiar with its general features,
- Convincing potential clients about the benefits of the product - arguments that influence the customer's decision to purchase a product or service,
- Support after sale – solution of any potential issues and communication with clients or providing the necessary service
- Forming a user community - in this case it refers to building long-term customer communication with the clients and customer support during mutual communication
- Solution of problems and crisis communication

With the use of social media is possible to find out what is the customer's perception of the product. This fact is not only important to the users who are looking for the right product or service, but also to relevant companies that offer their products and services on the market . Marketing with the use of social media means learning and understanding , observation of the market, experimenting, capturing an audience, analysing and evaluation. (McPheat, 2011)

3. CURRENT STATE OF THE MATTERS

Social media long ago stopped to be an unknown term for marketers, fact that is reflected by marketing expenses invested into this area as they are annually increasing. It is essential to emphasise that the statistics of the recent years which are supported by the opinions of experts do expect even more significant development of promotion in social media as well as expenses that are associated with it in next few years. This statements is also supported by the results of the analysis of the organisation CMO Survey (2013), which in February 2013 published the results of a study on a sample of 468 participants, that demonstrated an obvious trend of increases in expenses spent on advertising in social networks. This sample consisted of top marketers in companies operating in the United States within the rankings such as Fortune 1000, Forbes Top 200 as well as members of the AMA.

As shown by Graph 1, summarising the results of the survey organisation CMO Survey (2013), it can be seen that the current expenses spent on promotion in social media reach 8.4% (2013) share of total expenses on advertising online, however, what is more important is the fact that respondents predict an increase of these spendings. Regarding the next twelve months, expenses should increase by 3.1% to share value 11.50 %. It is necessary to point out the vision of those respondents who in next five years predict the increase in the share of expenses spent on promotion in social media to reach a level of 21.6%, which means a 257 % increase in comparison with the current state .



Graph 1 Estimated share of expenses on Social Media

Source: Cmosurvey.org

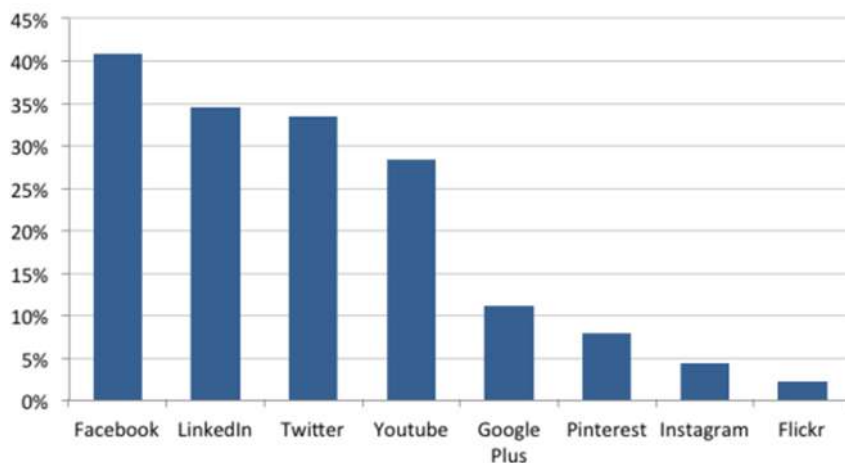
Marketing success of social media goes hand in hand with the quality and options which these communication platforms offer to their users. Social networking site Facebook is globally one of the most important social networks and at the moment it dominates the social media market with more than 728 million daily active users (DAUs) - average value of the month of September 2013, 1.19 billion monthly active users (MAUs) value of the month September 2013. In the case of comparison between years, there was recorded 25 % increase in daily active users (DAUs) and 18 % increase in monthly active users (MAUs). (Yahoo Finance, 2013)

This worldwide trend did not avoid Slovakia, where the value of active users is over 2 million users, representing 37.6 % of the total population, while in the case of the Internet population, it is 47.57 % (Socialbakers, 2013). As demonstrated by the Graph no. 1 during the last six months (Oct 2012 - Mar. 2013) the number of Slovaks on the social networking site Facebook has increased by 57,520 users, representing 6 % growth. Based on this fact, we can state that we are currently in a phase of slight increase. In order to compare the numbers, the number of Facebook users in the Czech Republic to this date is more than 3.38 million, which represents 53.32 % of total internet population .

Preferences of the users are also reflected in the corporate sector, what is confirmed by the results of a study published in the analysis (January 2013) of an organisation Platt Retail Institute (2013), which cooperated with the American Marketing Association (AM), where the social networking site Facebook dominates (Graph 2) in the case of the evaluated criteria the level of significance. This study was conducted on a sample of 859 people who were interviewed anonymously and they were both members and non members of the AMA, without any consideration of the geographical classification of the company in which the respondent operates.

As shown by Chart 2, social networking sites such as LinkedIn, Twitter achieved a degree of significance above 30 %, together with YouTube which compared to the other social networks achieved

more significant number to the perceived level of significance above 25 %. Below 5 % are social networking sites that are designed to share visual content - Pinterest, Flickr.

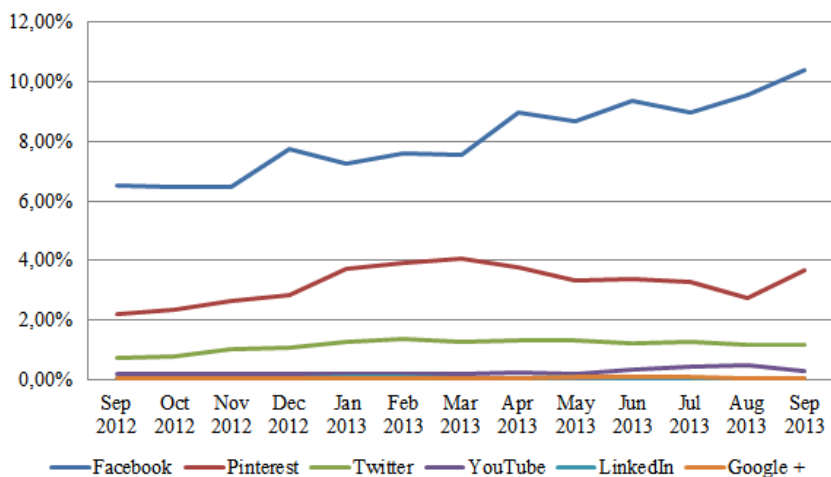


Graph 2 Significance of various networking sites

Source: Platt Retail Institute, 2013

For managers within marketing field is equally important as the significance of a channel of communication for its target groups the performance of ads or rate of return on expenses spent on promotion (ROI - Return On Investment). In the case of social media are these variables discussed topic, what is eventually reflected by the high interest of marketers in social media and especially social networking. Even considering this sector, the social networking site Facebook does not stay behind, as confirmed by the results of a study performed by a company Nanigans (2013) focused on the performance of this social networking site as an advertising tool. A study which analyses more than 200 billion of ads displayed on the ad system of social networking site Facebook from more than 100 companies from various sectors during first nine months of 2013 as compared to the same period in 2012 shows the following facts :

- CTR - Click-Through Rate between years grew by 375 % ,
- average value of ROI (Return On Investment) for year 2013 was 152 % ,
- between months June to September 2013, the CPM (cost per 1000 displays) of ads increased by 37 % to the value \$ 0.89 ,
- increase of CPM (cost per 1000 displays) between years for the month September 2013 represents the value of 169.70 % ,
- interesting discovery is the fact that within the users accessing the social networking site Facebook through mobile devices, ROI is 17.9 times higher among users with the system iOS (device from the company Apple) than among users with the Android system .



Graph 3: Share of traffic through referrals with the use of social networks

Source: Shareaholic, 2013

Social networking site Facebook also dominates as a source of traffic generated through referrals of the websites operators, as confirmed by the results of analysis of a company Shareaholic (2013). During the period between September 2012 and September 2013 this company collected data from more than 200 000 internet websites. The total sample of monthly unique visits to these websites achieved a value of more than 250 million. It is clearly displayed by the published results of the analysis that visits through referrals of the social network Facebook on the monitored websites of the operators formed in September 2013 more than 10% (see Graph 3), in case of inter-annual comparison there is 58.80% increase from the value of 6.53%. We must also point out that the social network Pinterest within relevant variable of traffic generated through referrals achieved 3.68%, which is more than a cumulative value of social networking sites Twitter, LinkedIn or Google+.

4. CONCLUSION

Current topic of social networking site Facebook as the leader in market of social media during last years caught interest of marketers all around the world. The actual technological progress online enables marketers to constantly expand the possibilities. And it is this social network Facebook which for the several years keeps proving that it represents a significant choice for the marketers during their decision making about choosing the suitable channel of communication with their target groups, as confirmed by the results of the surveys (Platt Retail Institute, 2013; CMO Survey, 2013; Yahoo Finance, 2013) conducted on users as well as companies. In addition to naturalness, which this new communication channel brings between the company and its target groups, there are also analytical tools, which keep evolving and mean a huge advantage compared to traditional media. These analytical tools enable marketers to modify and optimise chosen marketing strategies, what is also proved by the fact that the social networking site Facebook to month May 2013 reached more than one million active advertisers (Levy, 2013).

Research purpose, Project

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Digital certificates for public services

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Abstract The electronic communication in public administration is of major importance in the last years. New services such as e-procurement, e-auctions, and digital communication in general need efficient ways to secure data exchange. Digital certificates, together with certificate authority (CA) represent core components of the public key infrastructure (PKI) which can be used to secure digital identity. To deploy this infrastructure, multiple software tools, both commercial and open-source, are available. The paper presents fundamental issues and challenges in this field. Reference certificate authority solution deployed in academic environment is characterized. The core contribution of the paper is a proposal of new indicators which can be used to assess efficiency of PKI deployment in public sector.

Key words Certificate authority, digital certificates, e-government, public key infrastructure, public services

1. INTRODUCTION

Public administration and public services in general in recent years face new challenges when introducing electronic communication and informatization, respectively transformation of its processes into the electronic environment. Very important challenge, especially in the areas of e-procurement and e-auctions (Pridavok et al., 2013), is the identification in the electronic environment and trust-building within this environment (Delina et al., 2012). Nowadays, electronic communication is reality. Electronic documents' interchange accelerates business processes, data processing and other documents is more comfortable, reduces the error rate and improves the archiving possibilities. Electronic documents interchange through electronic mail or web portal is reliable and sufficient if the transmitted documents do not contain sensitive information. However important content can be misused or modified, when transferred through email or web. The reason is openness and low security of the Internet. In this case, it is necessary to use the classic form of communication and documents delivered in person or authorize by a notary service and use standard mail or courier services.

The analogy to the classical signature that authorizes the document and allows the electronic documents interchange and electronic communication is electronic signature based on asymmetric encryption technology. Digital signature technology enables efficient authorization of the document contents and prevention of change. Further it allows concealing the document content if it is required. Compared with the classical signature is the use of this technology safer. Also if all the requirements under the Act on electronic signature (which is valid in Slovakia since 2002) are met, then it is equal sign with a classic handwritten signature. When speaking about "open system", the validity of electronic signature is

general and it should be accepted by all Slovak public institutions and subjects. Successful and active use of electronic signatures in open systems requires a well-developed and functioning infrastructure and legislative support in the form of act on electronic signature.

Deployment of electronic signatures is possible in an environment with limited validity, aimed at a particular application in specific cases and infrastructure (so-called "closed system"). In such environment, the validity of electronic signatures and the way of use is subject to internal rules of the system. The advantage is faster and easier deployment, higher control over the system and less complexity. There is a lot of such closed systems that use electronic signature, examples are banks (e.g. in Slovakia: VÚB, ČSOB, Tatrabanka etc.) or public institutions (e.g. Tax Directorate, Customs Office etc.).

The basis for the use of electronic signatures in any system is well functioning and all safety requirements fulfilling Public Key Infrastructure (PKI). The center of the PKI is Certificate Authority or Certification Authority (CA), which acts as a trusted independent party (electronic notary) and according to the law it issues, confirms and maintains a list of valid certificates of the system users.

In Slovakia, there are five accredited certification authorities (ACA), which are accredited to issue certificates to users, the validity of which is in accordance with the Law on electronic signature. In addition to ACAs there are a number of certification authorities (CA), which form the basis of closed systems with varying degrees of relevance and applicability.

2. SOFTWARE FOR DIGITAL CERTIFICATES

The aforementioned challenges of digital certificates' integration in everyday processes which are required by the public administration and government can be achieved only with the appropriate technical resources. The core component of every PKI infrastructure is the certification authority. From the technical point of view, CA is implemented as a complex piece of computer software with multiple modules and interfaces.

The portfolio of available software products for the PKI deployment is rather restricted. This is due to the fact that correct implementation of the PKI requires integration of a cryptographic module in the whole system. This module is an essential part of the whole PKI ecosystem because it performs the basic operations needed for digital certificates and digital signatures operations. Development and integration of such a module is costly and long-running process which increases significantly the fixed costs of PKI development.

Therefore, only a small number of software products for building public key infrastructure are available on the market. From the proprietary software group we can mention certificate authority which is available as a part of the Microsoft Server software. The other possibility is to build certificate authority for public services from available open-source solutions. This solution is particularly attractive in e-government environment where the question of costs is important. The open-source software can be modified to the needs of an organization. Among the available open-source solutions for the deployment PKI services we can cite gnoMint (gnoMint, 2013), OpenCA (OpenCA, 2013), and EJBCA (EJBCA, 2013).

The last mentioned solution, EJBCA, is an enterprise PKI CA which is built using Java programming language by the Swedish software engineering company called PrimeKey Solutions (EJBCA, 2013). The EJBCA is today available in two different versions: enterprise and community. The first is fully certified commercial version which complies with the current standards and international laws. On the other hand,

the community version is aimed on the customers who does not necessarily need fully certified version, compliant with security standards. This open-source CA is one of the most widely used PKI solutions in the world. Among the reference installations one can find French ministries of Defense and Finances, National Swedish Police Board, or Chinese Local Taxation Bureau of the ZhuHai city.

3. DEPLOYMENT OF PKI: REFERENCE INSTALLATION CAEKFTUKE

At the Faculty of Economics, Technical University of Košice there exists for multiple years research in the field of electronic signatures' deployment and their use in business and public services. Since 2010 there exists here a fully working installation of the EJBCA from PrimeKey Solutions. The acronym for this reference installation is CAEKFTUKE (Certificate Authority of the Faculty of Economics, Technical University of Košice) (CAEKFTUKE, 2013). This installation started as a Master thesis project of one of this paper authors. Nowadays, this certificate authority serves for three main purposes. In the first place, it is an experimental environment for the researchers in the Department of Applied Mathematics and Business Informatics. Secondly it is used in the educational process to demonstrate the creation, working operation and revocation of digital certificates for the students of two bachelor study programs. They use it not only for the experiments with digital signatures, but also for the signing of emails and work with electronic documents' registry of the faculty. The last function of this CA is to provide SSL certificates for the faculty servers. In this way employees and students can access faculty information systems, which are mainly web-based, through safe encrypted connection.



Figure 1: Homepage of the CAEKFTUKE

The deployment of complex PKI infrastructure needs an appropriate hardware and software tools. The current installation at the Faculty of Economics, TUKE is deployed on a server with 2 GHz Intel Xeon core and 8 GB of RAM. The system runs on Linux OS (Ubuntu) with JBoss 5.1. application server, Tomcat web server, and MySQL database.

4. MEASURES OF PKI EFFECTIVENESS

The construction of indicators is an effective way of systems' performance assessment (Janke et al., 2013). To facilitate the comparison and measurement of multiple Public Key Infrastructure solutions' usage in public services, we have decided to design a set of indicators to address various aspects of PKI solution introduction into practice use. They are defined and characterized hereafter.

Efficiency Indicator:

$$I_e = \frac{\text{Number of users}}{\sum \text{PKI introduction costs}}$$

Efficiency indicator gives in ratio number of users with sum of costs involved in PKI introduction. The higher I_e means better efficiency of costs spent on introducing of PKI in given public administration application.

Usage Intensity Indicator:

$$I_{UI} = \frac{\text{Number of uses within half year}}{\text{Number of users}}$$

Usage Intensity Indicator 2:

These indicators show the intensity of PKI solution use by giving number of uses within year (or half year) into ratio with number of users of given PKI. The higher number of uses by PKI users means higher intensity of PKI use. Comparison of both these indicators can show if speed of PKI adoption is increasing or decreasing. When I_{UI2} is higher than $2I_{UI}$, usage intensity of PKI solution is increasing in time.

Indicator of adoption:

$$I_a = \frac{\text{Number of users to date}}{\text{Number of all potential users}}$$

Speed of adoption indicator:

$$I_{a2} = \text{Time until half of eligible users adopts use of PKI}$$

Both these indicators show how fast is PKI solution adopted in given case of use. Higher number of users using PKI solution to date in context of all potential users in given country shows fast adoption of PKI. Indicator I_a may have value from range $<0, 1>$.

Indicator of usability:

$$I_u = \frac{\text{Number of services available by use of PKI solution}}{\text{Number of all public services}}$$

For PKI use in public services is necessary to introduce wide palette of public administration applications to allow its use in multiple cases and increase its usability. Indicator of usability shows how widely the PKI solution is usable in terms of all public services available in given country. Indicator I_u may have value from range $<0, 1>$.

Indicator of security:

$$I_s = \frac{\text{Number of misuses}}{\text{Number of uses}}$$

This indicator shows ratio of number of misuses with number of users. The PKI solution is safer, when number of misuses lower at given quantity of users. Indicator I_s may have value from range $<0, 1>$. The lowest level of security indicator ($I_s = 0$), indicates that PKI service was never misused and is the most desirable value. The highest level of indicator of security ($I_s = 1$) would mean complete misuse of PKI solution every time it is used.

The nature of indicators of security, usability and adoption allows us to compose integrated indicator from these single indicators. It might have following form:

$$I_{PKI} = \frac{I_a + I_u}{2} - I_s$$

This composite indicator considers several aspects (usability, security and rate of adoption) of PKI use in public services and gives fast view of quality of PKI solution introduced in public administration of given country. Indicator I_{PKI} may acquire value from range $<0, 1>$ and the highest value (0) represents ideal PKI introduction with full adoption ($I_a = 1$), usability of PKI for all services of public administration in country ($I_u = 1$) and maximum security with no misuses of given PKI solution ($I_s = 0$).

5. CONCLUSION

Public key infrastructure allows issuance of certificates digital signature. In this article we deal with the issue of the use of these digital certificates issued by certification authorities for the purposes of electronic communication when using various electronic services. PKI certificates can be issued by certification authorities with different software solutions. We further discussed open source solution of certification authority EJBCA from PrimeKey Solutions, which is in practical use in the educational process in the form of Certificate Authority of the Faculty of Economics, Technical University of Košice (CAEKFTUKE) at our faculty.

Furthermore, we propose several indicators to measure the effectiveness of PKI solutions and making it possible to compare several solutions among themselves. In addition, we proposed composite absolute indicator that shows basic quality of PKI solution in one absolute measure. Our further research will focus on the use of the proposed indicators to evaluate the effectiveness of multiple PKI solutions.

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Innovation Support in the Work of Teachers in the Context of Further Education

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Abstract

The report is aimed at the innovation support in the work of teachers in the context of further education. We are trying to learn about the contribution of further education for the innovative pedagogical practice of the elementary school teachers. We focus on the description of innovations, the innovative process in the pedagogical context, and further education of teachers. In the conclusion we interpret the results of the realized research. The interpretation of the results is elaborated in three areas – characteristics of the respondents, analysis of further education of teachers with an overview of the seminars aimed at the topic of innovation, and finally the analysis of innovations in the education of teachers.

Key words: Education of teachers, innovations in education, further education

Teaching is a profession that is characterized by the need for further education, the need to acquire new knowledge and skills and then apply them in practice (Lazarová, 2006). Teachers and educational staff are involved in the implementation of the changes in education. There are great demands on their personal and professional qualities which should be developed and consolidated through the further education of the teachers. Teachers thus embody change, and therefore they should respond to community development in all areas of human activity. For that reason there is the need to introduce changes into teaching, that is, to upgrade the teaching practice

The term innovation comes from the Latin word *innovare* with the meaning to renew, to do again, to change; in this way also the renewal of human activity and thinking. Innovation is a long term process,

which is certainly not a linear and with no a clear direction. It is a cyclical process (recurring) and permanent (continuous) as also the external conditions in which the innovation process occurs are continuously transformed (Novotný, 2004).

Education and training began to be influenced by the innovation in the 50th in the last century. In the educational terminology the term innovation is quite widespread, however, its definition is not clearly defined. The team of authors of Pedagogical dictionary define the term innovation in education as "the overall title for the new teaching concepts and practical measures, especially in content." (Průcha, Walterová, Mareš, 2003, p. 85). Skalková (2004, p.82) states that innovation is usually understood as "development and practical implementation of new elements into education and training systems." The aim of the innovation is the improvement of such system. Innovative schools may be then defined as schools which try to make a change within the common school. Such schools focus on personal and social development of pupils, on constructivist ways of knowledge, on integration in teaching process. Innovation is not just an idea or thought, but rather an indication of the implementation of this idea into life.

It is necessary to think about what the pedagogical innovations should be directed toward, what should be their meaning. In special literature, the following areas of education, which the innovations may be related to, appear (Skalková, 2004)

- humanization of education,
- education oriented on personality,
- democratisation of education,
- more space for self-fulfillment,
- implementation of technology into teaching process,
- the change of interaction between student and teacher,
- the change of content and objectives of education,
- new methods and ways of working (energizing).

In the article we also attend to the field of further teacher education as an essential part of educational innovation. In the literature the further education of teacher is mentioned as well as its equivalent – further education of pedagogical staff (educators, educational consultants, etc.). Pedagogical Dictionary defines further education of teachers as „education of teachers in the course of their career and it is understood as „a right and duty of teachers in their active service." (Průcha, Walterová, Mareš, 2003, p.36). Kohnová (2004, p. 59) describes the further education of teachers as:

- systematic, continuous and coordinated process related to undergraduate education and which lasts during the all the time of teacher's career,
- lifelong professional development of professional competencies of teacher and continuous personal development of teacher,
- one of the fundamental assumption of the transformation of education,
- the most effective form of balancing of content and methods of education with the rapid transformation in economic-technical and cultural-social context.

The objectives of further education of teachers are based primarily on required competencies of a teacher. The development of such competencies should encourage education. According to Lazarová (2006) the objectives related to development of teacher include:

- to improve their own skills and competencies,
- to learn in an appropriate way to participate in the events and changes in the institution,
- to contribute to the professionalism, to become more responsible and autonomous,
- to adjust personal qualification to the new or changed qualification,
- to compensate the deficiency of undergraduate education,
- to acquire new tools necessary to participate in changes and innovations, etc.

The content of further education depends on set objectives. The content of further education of teachers is very wide reflecting the cultural traditions and value system, but also reacting to changes in all fields of human activity such as art, science and research, changes in ways of life, etc. Further education vary depending on the set environment, it also becomes the means to tackle the coming changes as well as it prepares for future changes.

The educational process requires the use of innovation, experience and modern methods of work (Zahatňanská, 2009, Račková, 2008). The form of teaching activities, thus the way of the organization of education, have been changed in recent years. The offer is still more diverse and implemented in various forms. The new forms of educational activities are promoted mainly with the development of information technology. The modern forms of further education of teachers include discussion forums, e-learning, exchange programs in schools, working on projects, supervision, development of work teams, internal training conducted either by external lecturers or teachers themselves, selfstudy, etc.. (Lazarova, 2006). According to Gyurák Babel'ovej (2008) to receive the benefit of such education it is important not only to choose a suitable educational activities, but mainly to be able to consider to what extent they have been effective.

Education of adults, which includes also further education, offers a variety of forms of realization of further education. Each form has its own specifically defined objectives with the associated methods and ways of work. The most common educational form is a *lecture* and *training course*, which is associated with a short-term, one-time getting of information related to the topic. The *seminar* is a common form of teaching at high school as an addition to the lecture. It is usually used when the involvement of participants in the debate with exchanges of experience is assumed. The *course* is an individual form of education, usually consisting of several units - lessons, lectures, seminars and exercises including experiments or modern communicative technologies mostly in the subjects of science (Taylorová et al., 2006; Poráčová et al., 2005). The *training* is a form of education focusing on personal development. It is usually associated with psychological themes. The *workshop* is the organizational form of group solution of a problem. The working group exchanges opinions, seeks an optimal solution, or a statement of the problem. In studies devoted to teaching methods Ferencová, Bašistová (2008) evaluated that in education also the demonstration, workshop, brainstorming and play are actively used.

Novotný (2002) announces that the basic problem of further education of teachers include the connection between theory and practice. Therefore, it is necessary to pay attention to learning objectives focusing mainly on systematic and purposeful use of newly acquired knowledge in practice. The aim of education is that teachers implement new knowledge into their teaching practice. Model lessons and their reflexion, time for planning and long-term courses may be highly effective.

Research:

The goal of the study was to reveal the attitudes and opinions of teachers toward the possibility of their further education in relation to innovations in education as well as to find out what teachers understand by innovation in education. We focus also on courses that are offered to teachers, in which form they are

carried out, which form teachers prefer and what is the contribution of such courses for teaching practice.

Methods:

The method of questionnaire was used to acquire the information concerning the situation of further education of teachers (DVU) in relation to educational innovation. Questions in the questionnaire included information on the seminars that were realized within the further education and information on innovation in education

Research sample:

The target group include the teachers of primary schools. Eight primary schools of Prešov region was studied in the research. The questionnaire was distributed personally after the previous telephone agreement with the school. The questionnaire was picked-up personally. Responded filled the questionnaires voluntarily and anonymously. The research was conducted in May - July 2009. The research sample included 161 respondents (29 men and 132 women) aged 20-62 years, with the average age of 40.73 years. In the city of Prešov work 102 respondents and 59 of interviewed teachers work in the country.

Interpretation of results was divided into three parts:

- profile of respondents involved in research,
- analysis of DVU in schools and overview of courses with innovative features,
- analysis of innovations in education in the work of teachers.

The items in questionnaire were closed, semi-closed and also open to provide teachers place for their own comments to the questions.

Hypothesis:

H1: We assume that the attitudes of teachers of primary schools toward innovations in education differ due to the length of teaching experience.

Table 1: The promotion of innovations with regard to the length of practice

The length of pedagogical practice	yes	no
up to 15 rokov	96,4%	3,6%
over 15 rokov	88,8%	11,2%

The above figures show the percentage of positive and negative responses of teachers to the question whether or not they are fans of innovations in education, from the total recorded responses. As mentioned above, teachers were divided according to the length of teaching experience into two groups - the practice of teaching up to 15 years and teaching experience over 15 years.

The above results show that 96% of teachers who teach less than 15 years indicated that they support innovative trends in education and only 4% of teachers are against. Similar results are also monitored with teachers with more than 15 years of experience. Innovations in education support 88% of teachers, 12% are against. Length of teaching experience, therefore, does not influence the attitudes of teachers toward innovation in the learning process. It is a very positive result because it shows that teachers tend to change and improve their work, adapt to the demands of a new era. **Hypothesis 1 was not confirmed.**

H2: We assume that the attitudes of teachers of primary schools toward innovations in education are different due to the place of their performance.

Table 2: The promotion of innovations with regard to the place of their performance

The place of performance of teachers	yes	no
schools in city	94,1%	5,9%
scholls in rural areas	86,6%	13,4%

The acquired results show the difference in attitudes of teachers toward innovations in terms of the place of the performance of of the interviewed teachers. Teachers working in the city show approval with innovations, 94.1% are for the innovation and only 5.9% of teachers from these schools are opposed to innovations in education. Similar results were achieved in the answers of teachers who work in rural areas - 86.6% were identified as supporters of innovations and 13.4% do not incline to the innovative efforts in education. The mentioned results may be partly biased by the differences in the number of teachers interviewed in the city (102) and village (59). In both cases there are more teachers supporting the efforts to implement innovations in education than their opponents. Neither this **2nd hypothesis was confirmed.**

The results reveal that the attitudes of teachers toward innovations in education are neither influenced by the length of teaching practice nor by the place of their performance - city or countryside. Such approach depends mainly on the teachers themselves, and on their attitudes towards innovations.

H3: We assume that the further education of teachers is beneficial for the pedagogical practice of the teachers.

In Tables 3 and 4 we demonstrate how the teachers perceive the benefit of seminars with innovative features for further practice as well as the reasons of their usefulness for practice.

Table 3: Contribution of seminars of further education to practice of teachers

valuable	91,6%
unvaluable	8,4%

Table 4: The reasons of usefulness of seminars to practice

new ideas, methods and forms of teaching	41,8%
new experience, exchange of experience	27,6%
depending on the topic, the lecturer	13,3%
cooperation and contact with other teachers	9,6%
information about literature	6,5%
if it is not just a lecture	4,8%

As valuable and useful seminars teachers indicated such seminars where they acquire new ideas and they learn new forms and methods of work. Such seminars are useful for them also in terms of new experiences and confrontations with other participants. The teachers evaluate the contribution of seminars in relation to the approach of lector as well as the thematic approach of the course, for some a co-operation with other teachers and the acquisition of new contacts are essential. For teachers also to acquire new information and an overview of the available literature is important. For them mainly the courses not being realized only in the way of lectures, but also including the accruing elements are useful.

8.4% of interviewed teachers indicated educational activities as unvaluable for their teaching practice. Mostly the arguments supporting their choice included that they have not enough time to apply new knowledge into practice, that nothing what they learned was useful for the practice so far, or that always the same things repeat.

Concerning the overall evaluation of benefits and usability of new experiences and information that teachers acquire at seminars of further education, we may evaluate it as clearly beneficial. According to the received data, teachers evaluate seminars as being beneficial and useful mainly in terms of acquiring new ideas, acquaintance with new methods and forms of teaching and the possibilities of transfer and exchange of new experiences. Inspiration for changes in the work teachers acquire through seminars, which are offered to them within the further education of teachers. Teachers perceive seminars positively, they gain new inspiration for teaching from seminars. We may conclude that **3rd hypothesis was confirmed**.

Analysis of further education of teachers

In the research we also observed whether the seminars focusing on innovative approaches to education are provided in schools, what forms of educational activities in terms of their implementation are performed, and which forms of educational activities are preferred by the teachers. We also pay attention to how and in what teachers perceive the benefits of these seminars for their teaching practice.

In Table 5 information about the forms of educational activities of further education within which further education is realized is presented. Table 6 show information about which forms of educational activities are requested by the teachers.

Table 5: Forms of courses attended

lecture	89,8%
workshop	53,1%
discussion	50,3%
other form	5,9%

Teachers usually attend the courses where the topics are lectured (89%). Also the learning events where the teachers are provided with the place for discussion are realized (50%), teachers may clarify the topic, exchange experience, inspiration, etc. More than half of respondents reported that they participated in seminars conducted in the form of workshop, which are great assets for the work of a teacher because teachers may try individual steps in practice, they are provided with the space for collaboration with other colleagues, etc. As other forms of further education teachers presented practical demonstrations, residence, or focusing on co-operation.

Table 6: Preferred forms of further education of teachers

workshop	34,5%
practical demonstrations (model lessons)	26,3%
discussion	22,8%
lecture with practical demonstration	9,4%
I do not care	7,1%
lecture	5,9%
according to topic	5,2%
lecture with discussion	4,8%

Results in Table 6 reveal that from all forms teachers prefer an interactive form of teaching, workshop, expressed by 34.5%. Practical modeling lessons where teachers would be shown specific way in teaching are preferred by 26.3% of teachers and discussion is preferred by 22.8% of teachers. Teachers are also interested in lectures combined with practical demonstration or discussion, or form of education that is adapted to lecture topic. Indifference on the form (I do not care) above is demonstrated by 7.1% of respondents. Considering the preferred forms, it was revealed that about half of teachers prefer forms, where the emphasis is on their own participation in the activity and the second half of the participants prefer forms of educational activities associated with their passivity.

We determined what teachers understand by the term "innovations in education", whether they try to change their work and improve, and what are the areas where they work better to promote changes, where they are not successful, and whether they have problems to implement the innovations into practice.

Table 7: Ideas of teachers about the innovations in education

new methods and forms of work	45,1%
change in school	14,5%
new approaches, innovations in teaching	14,2%
use of technology (multi-functional plates), modern technology	13,3%
new method of evaluation	10,8%
non-traditional way of teaching	10,6%
project teaching	8,4%
progress in education	6,3%
change in relation teacher - student	6,1%
lead to independence	5,2%
comprehensive and systematic provision of information to teachers and school management from the field of educational process	2,7%
use of different tools	2,6%

In Table 7 the most common answers to the question of what teachers mean by the term innovation in education are presented. Almost half of asked respondents viewed innovation as new methods and forms of work. 14.5% of teachers present the innovations as changes in the whole structure of school and a similar number of respondents specify the innovation as new approaches and new techniques in teaching. Teachers indicate as innovation in education also the use of modern technology in education (computer, internet, e-learning, multi-functional plates). A new method of evaluation is perceived as innovative by 10.8% of teachers and by the same number of teachers innovations are perceived as unconventional way of teaching. As others project teaching, progress in education, change in relation teacher – student, lead to independence, comprehensive and systematic provision of information to teachers and school management from the field of the educational process and the use of different tools are mentioned.

The above ideas of teachers about innovative progress were linked to their positive perception. Also the negative perception of innovations in education was demonstrated. The answers of teachers include for example „I am not teaching any more, I am innovating“, „the attempt of sages to speak about something I do not understand“. However, these were only few of the answers. The ideas of teachers are different but more positive evaluations of this term dominate. Teachers perceive innovations in didactic-methodology line, this means that they focus on practical asset of new changes. 97% of interviewed teachers try to change or promote their work. Only 3% of respondents are not willing to change anything, they support their answer with the words: „nobody is estimating this“. They state that they would become fans of innovations only in the case that the management of the school would somehow rate them.

Table 8: Areas of changes in the work of teacher

methodology, procedures	39,4%
independence of students	19,8%
group work of students, collaboration	18,5%
work with computer	14,8%
forms of work	13,7%
implementation of new knowledge in practice	11,6%
self-education	9,5%
projects, problematic tasks	8,7%
critical thinking of students	5,6%
individual approach	5,5%
Entertaining form of teaching, varied teaching	5,4%
Creativity	4,9%
involvement of games and competitions	4,8%
more use of aids and teaching technique	4,3%
new ideas, activities of learning	3,9%
Motivation	3,6%
methods of evaluation, self-evaluation of students	2,9%

cross-curricular relations	2,5%
communication with children and parents	2,2%

Most teachers try to change and improve their work mostly in the field of choice of methods and practices in teaching, this was stated by 39.4% of respondents. As indicated in Table 8, the efforts of other teachers in the terms of changes are also related to methods and forms of work in education, but are also more specified. Further efforts primarily focus on the support of students independence 19.8% and the support of the group work and cooperation 18.5%. Teachers also try to involve computer technology into teaching process using the Internet or presentations created and presented by the students 14.8%. 13.7% of respondents try to change their forms of work, to implement new knowledge into their teaching 11.6% and self-improvement 9.5%. Furthermore, the interviewed teachers reported projects, problem tasks, critical thinking of students, individual approach, entertaining form of teaching, varied learning, creativity, involvement of games and competitions, the use of tools, new ideas, motivation, methods of evaluation, cross-curricular relation, important communication with children and parents.

SCHOOL AS A PLAY – such we may identify the efforts of teachers who use experiential and entertaining form of teaching using games, competitions, supporting the creativity of students.

The results of the research may be evaluated very positively, because most teachers try to change their work in some way and what teachers try to change is in a fact the content of their further education. This fact is also confirmed by responses of the interviewed teachers who try to implement new knowledge into practice, but are willing to use new methods, project learning, to promote critical thinking of students and to use computers in teaching process. New knowledge and experience teachers acquired at the seminars of further education, therefore, this has a huge impact on the future work of teachers.

Table 9: Obstacles in effort to implement changes

finance	11,8%
material equipment	9,3%
lack of time	8,3%
administration	6,2%
reluctance of students	2,1%
behavior of students	1,9%
outdated thinking of colleagues	1,4%

Table 9 reveals that the most common obstacle in order to create changes in learning process that teachers feel are finance 11.8%. Furthermore, teachers indicate material equipment of class and schools, including the fact teachers must create most of teaching material – usually in their free time 9.3%. Another obstacle is lack of time, it means 45-minute lasting lesson 8.3%. This is confirmed also by the words of one of teachers "45 minutes is a short time neither to explain the individual topic, nor to try to enforce any change and explain it to students. Obstacle for teachers is also the administration (6.2%) and legislation. The reluctance of students to do anything extra, as well as the behavior of students, outdated thinking of colleagues who do not incline to any changes make their work also more difficult.

Conclusion

Innovations present a part of the operation of each system (also social) and they possess the phenomenon of change itself, which may not have only a positive outcome. Innovations themselves are perceived as positive even in education where they are hardly definable. Innovation primarily defines long-term process which never ends, but it is undergoing a constant renewal. It is important that this process does not become routine and in this way lose its meaning, original intent. Dogmatic application of any idea may lead to negative or opposite result. In the process of innovation it is necessary to capture the right time for its implementation, i.e. that the external conditions are suitable for the introduction and implementation of our innovative effort. However, external conditions do not ensure that innovation will be successful. Equally important component that must have positive performance to take a change is the target group, which will work according to this change. We must, therefore, pay attention to introduce innovation not only to professional but also the general public in the clearest way with regard to its benefits and practical use. This should be applied not only in teaching practice, but in all areas where the innovative efforts are promoted.

Innovations are linked to the progress in various fields of human activity. Change or progress in one area supports the changes in other areas seemingly unrelated together. However, the field of education must be flexible in response to any developments or discoveries in all areas of human activity - cultural, social, technical, scientific and economic. Teachers are aware about the need to respond to changes in society and they encourage innovations in education. A means of coping with changes are also seminars of further education, which are very important for personal and professional development of the teaching profession. Teachers, however, need greater support from their surroundings, colleagues, management of schools, parents and pupils to enhance their efforts. If there is a lack of support from the external environment, the process of implementation of changes into education is not successful, or it is very slow. It may happen that the teachers become tired to constantly overcome external and internal barriers resulting into the development of internal barriers and that concerning their innovative efforts they just give up. If the school functions properly as the initiator of changes supporting the education of teachers, the favorable climate for implementation of innovation in the school environment is developed.

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Employees as the shareholders of Lower Silesian enterprises

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Abstract This article is devoted to employees, who are an important group of stakeholders. It was made an attempt to define stakeholders' purposes and expectation, based on literature. Then, expectations of this group are estimated, based on survey conducted among employees of Lower Silesian enterprises. Results were used to analyze the level of satisfaction of employees' requirements. Attention is drawn to diversity of companies, both in terms of size, type of business activity or organizational and legal forms. Results of research have showed that financial expectation as satisfying salaries are main employee's purpose and they are satisfied in majority of enterprises.

Key words employees, stakeholders, employers, conflicts of interest .

INTRODUCTION

Human resources are the most valuable but also the most unpredictable resource of any organization, which can mean a deep involvement in the company's life or an action that does not allow fully use of other resources, opportunities in an environment or awkwardness in overcoming of emerging threats. Therefore, employees can solve difficult problems, perform the most complicated tasks, realize ambitious strategies or create problems and be clumsy in their daily duties.

Employees, like other groups of stakeholders have their own purposes and expectations, which they intend to realize by working for a company. A range of these purposes and requirements is an individual affair of each employee, although even in case of a single person, due to various factors, changes can also occur over time. Employee engagement in company's life depends on the level of satisfied requirements and his personal purposes, which were realized. However, even in a case of internal stakeholders, there is a conflict of interest. Even a primary objective of every employee – salary, which is his income and employer's expense. Other employee's non-profitable expectations are most often company's costs. It applied to employee development carried out through various forms of perfecting that are at the expense of entrepreneurs. Even common free training, organized by suppliers, mean preclusion of employee from a current activity and a necessity of one's replacement.

Promotion, in a set of employee's expectation, means a use of at least a partial internal recruitment and limits an afflux of "fresh blood" to company in a form of people, who have a new view on company's functioning.

Care about employees' interests is obvious to every employer, but it is also necessary to keep in mind demands of other groups. In addition to managers, who also report with greater pressure, their own requests, with diversified strength, external stakeholders interact, realizing their own purposes, which sometimes are in conflict with company's purposes.

Employee that meets his expectations, it is employer's ally in confrontation with environment and stakeholders who are also located there.

The purpose of this article is to assess a level of satisfaction of employees' requirements in enterprise in a current situation, on one hand with a high unemployment and on the other with opportunities to find a better job on European Union markets. High level of unemployment gives a chance to find an employee for "lower price". In contrast, open labor markets cause an outflow of professionals, because salaries proposed there are much higher.

European markets successfully tempt young people, because as research shows, mobility of employees in Poland is at the highest level among European countries¹. For resident, who lives in the southern part of the country, it is no longer a problem to go "for work" due north of the country or continent.

The survey was conducted among employees employed in Lower Silesian enterprises.

EMPLOYEES' PURPOSES AND EXPECTATIONS

The approach proposed in the Stakeholders Theory² is that managers pay attention to other groups, their requirements and build a proper relationship with them. According to it, entrepreneurs should build a proper relationship with other groups, which have an interest in enterprise's functioning to realize enterprise's purposes. Chances to realize firm's strategy may increase only when all groups are involved. Company's environment and market action are also very important. In this case, organization may be supported by other market entities, but actions hindering success may also occur. Company's successes will be interesting entities that will bring benefits related with them. These entities include suppliers, because increase in recipient's income gives them an opportunity to increase their sales. Stable financial situation also gives possibility to use trade credit, because of a lower risk of insolvency. Other stakeholders are customers, for whom manufacturer (seller) with a stable market position meets obligations related to product warranty, purchase of spare parts and reduces actions harmful for customer, because it can cause its loss. Other major market players are competitors, who by definition take action hindering an acquisition of new customers, because it is not in their interest.

Internal stakeholders are groups that exist within the organization, for which enterprise is an employer. These are employees and management staff, separated among them, most of which is related to employment relationship with company. According to Article 22 of the Labor Code. § 1, *An employee, by establishing an employment relationship is committed to particular type of work, for employer and under his leadership in the time and place designated by the employer, and the employer to employ the employee in return for remuneration*³. Managers are employees, like all remaining staff. In contrast, lower-level managers perform tasks under the leadership. Their functioning is very similar to tasks performed by other employees and in addition they are responsible for work of a group of his subordinates. Purposes are also similar, it is assumed, that expectations and purposes of this part of managers are also similar to those of other employees. With an increase of management levels a range of management also increases, so number of subordinates also increases and objectives set for managers change. Their requirements and expectations will differ more and more from their subordinates. In case

¹ Mobility of employees is understood as a willingness to change jobs. In our country, it is at a high level. Mobility index in Poland amounted to 105 points, while the average for all surveyed countries was 102 points. (The lowest level of mobility among all surveyed countries was in Germany); see: Ślusarczyk B., Kot S.: *Logistics Education as a Way for Unemployment Reduction*. [in:] IETEC'11. International Engineering and Technology Education Conference. Enhancing 21st Century Skills for Global Engineers and Technology Professionals. Conference Proceedings. Kuala Lumpur, Malaysia 2011

² R.E. Freeman, D. Reed, *Stockholders and Stakeholders: A New Perspective on Corporate Governance*, „California Management Review”, XXV (2), 1983.

³ Ustawa Kodeks Pracy, Dz.U. z 1998 r. poz. 94 z późniejszymi zmianami,

of managerial staff of organization, which performs strategic objectives, there is a completely different range of requirements and expectations. Here, formal bonds may take a form of management contract or civil-law agreement that replaces or occurs simultaneously with an employment contract. For middle management and senior management primarily, the main purpose is "professional fulfillment"⁴, which consists of specific purposes, as realization of higher-order requirements.⁵ These are:

- possession of power,
- creating reality,
- appreciation of their professionalism,
- prestige and increasing position in an enterprise,
- increasing power of decision and freedom of action⁶.

An enterprise as an employer is assessed by its potential employees, mainly by measures such as⁷: level and growth rate of salaries, state and prospects of employment growth and stable financial situation.

If the company is not "attractive", employer may be omitted, when searching for an employer⁸.

Employees' purposes - members of organization, relate mainly the level of their life and expectations associated with it, these are among others:

- employment security – in form of employment contract for an indefinite period,
- satisfying salaries and additional social benefits,
- possibility of promotion and development,
- high level of satisfaction and self-realization at work,
- participation in decision making processes,
- complete information about company
- „friendly atmosphere” at work⁹.

It should be noted that in companies managed by owners, which prevail in the SME sector, expectations of management of low and medium level can be very similar to employees' expectations. Simultaneously, employees take into account not only financial possibilities of company, non-financial expectations may also be different. In the smallest entities, micro-enterprises, there is a radial structure

⁴M. Janisch, *Das strategische Anspruchsgruppenmanagement: Vom Shareholders Value zum Stakeholders Value*, Verlag Paul Haupt, Bern, 1993, p. 23.

⁵M.J., Stankiewicz, *Konkurencyjność przedsiębiorstw. Budowanie konkurencyjności przedsiębiorstwa w warunkach globalizacji*, Dom Wydawniczy Organizator, Toruń 2002, p. 42; . Brzeziński A., Brzeziński S., *Rodzina jako interesariusz małych i średnich przedsiębiorstw*, w: *Firmy rodzinne – determinanty funkcjonowania i rozwoju. Strategie zarządzania przedsiębiorstwem rodzinnym*, red. A. Marjański, „Zeszyty Naukowe” 2011, t. XII, Z. 7, Łódź 2011, p. 110.

⁶T. Gołębiowski, *Zarządzanie ...*, wyd. cyt. p.106,

⁷M. Gableta, A. Brzeziński, *Realizacja funkcji personalnej w małych i średnich przedsiębiorstwach*[w:] „Optimum. Studia Ekonomiczne” nr 4(16), Wyd. Uniwersytetu w Białymstoku, Białystok 2002, p. 133.

⁸Potwierdzają to specjaliści z firm doradztwa personalnego. Więcej zob.: M. Juchniewicz-Rembelska, O. Świerzewski: *Dusza firmy czyli jak szukać pracowników*, „Gazeta Wyborcza” Dodatek Mój Biznes nr 8 z dnia 22.03.2009, p. 3.

⁹Por. R.I. Ackoff, *Zarządzanie w małych dawkach*, PWN, Warszawa 1993, p. 7-9; p. 242; T. Gołębiowski, *Zarządzanie strategiczne.....*, wyd. cyt., p. 106; A. Brzeziński, *Pracownicy jako interesariusze firmy rodzinnej*, *Zeszyty Naukowe Wyższej Szkoły Bankowej w Poznaniu*, Poznań 201, p.283, Pietrasiński, P.: *The evolutionary character of supporting the internationalisation processes—recommended system solutions*. Polish Journal of Management Studies 4 (2011).

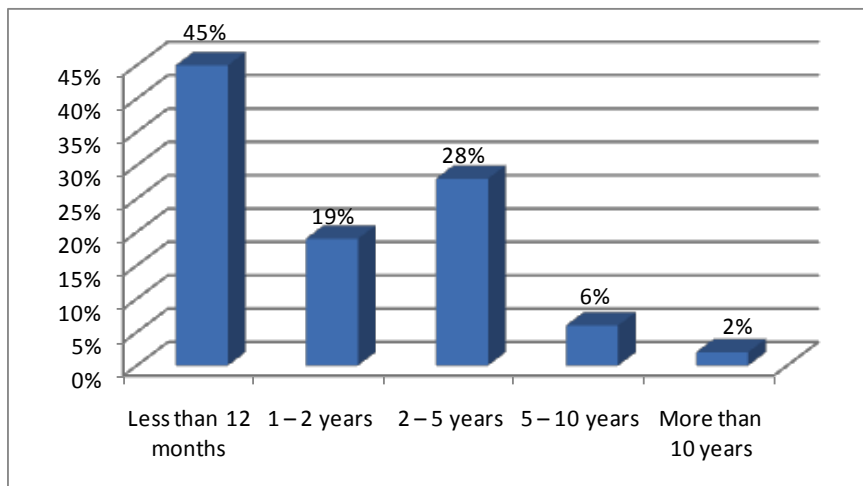
with one manager¹⁰, or entrepreneur's functioning resembles concept of "owner and his assistants", which was promoted by W.F. Taylora¹¹, and there is no possibility of promotion. The organizational structure can be introduced very late in case of family companies, where cast of emerging positions is mainly by family members or relatives.

Employees in their expectations, purposes or requirements usually take into account employer's possibility, but also a situation on labor market. In regions with higher unemployment financial expectations are probably lower. Financial expectations towards Polish employees may be much higher in border regions, where work abroad can be reconciled with a daily family responsibilities.

REALIZATION OF EMPLOYEES' PURPOSES AND EXPECTATION IN LOWER SILESIA ENTERPRISES

The study was conducted among employees of Lower Silesian enterprises who study on two Wrocław universities (University of Economics and School of Banking) in the academic year 2012/13. Sample selection was random and it consisted of 142 respondents. The survey contained 15 closed questions, 7 of them consisted even 16 proposed responses. A few of the obtained surveys were rejected, because respondents were unemployed, work in other institutions than enterprise or did not answer on most of the questions. Analysis was conducted among 129 respondents. Respondents are employees of Lower Silesian enterprises from Kępno, Głogów, Wrocław, Świdnica and Zgorzelec. Figure 1 presents an employment period of respondents.

Figure 1. Employment period of surveyed employees



Source: author's own elaboration based on research

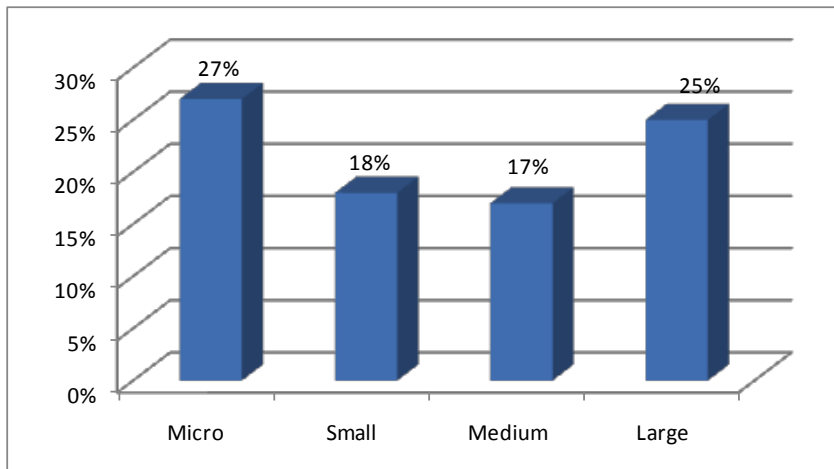
¹⁰ Ł. Sułkowski, A. Marjański, *Firmy rodzinne, jak osiągnąć sukces w sztafecie pokoleń*, Poltext, Warszawa 2009.

¹¹ P. Drucker, *Zarządzanie w XXI wieku*, Muza SA, Warszawa 2000, p.10

Most of respondents are employed on less than 1 year (45%) and 2-5 years (28%). There are only a few employees whose employment period is more than 10 years (2%). We are dealing with a young staff. It should be noted that current enterprise is the first employer for 25% of respondents.

Enterprises that employ them, are predominantly micro enterprises (staff <10 people), 27%. Equally numerous are large companies (staff > 249 employees) 25% share. Small and medium-sized enterprises are also similar-sized groups, respectively, 18% and 17%. Figure 2 presents exact division.

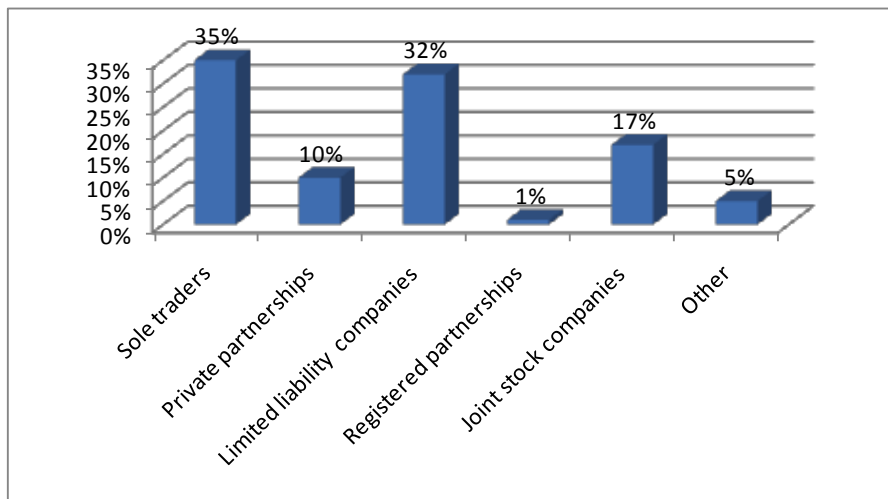
Figure 2. Division of employers taking into account company size



Source: author's own elaboration based on research

Figure 3 presents division of enterprises taking into account organizational and legal form. Sole trader as a type of business activity prevails (35%). Every third company is a limited liability company (32%). There is also distinct group of joint stock companies, while private partnerships are few. A smaller group are joint-stock companies (17%), there is little private partnerships and only one registered partnership. Other companies constitute small, common group (5%).

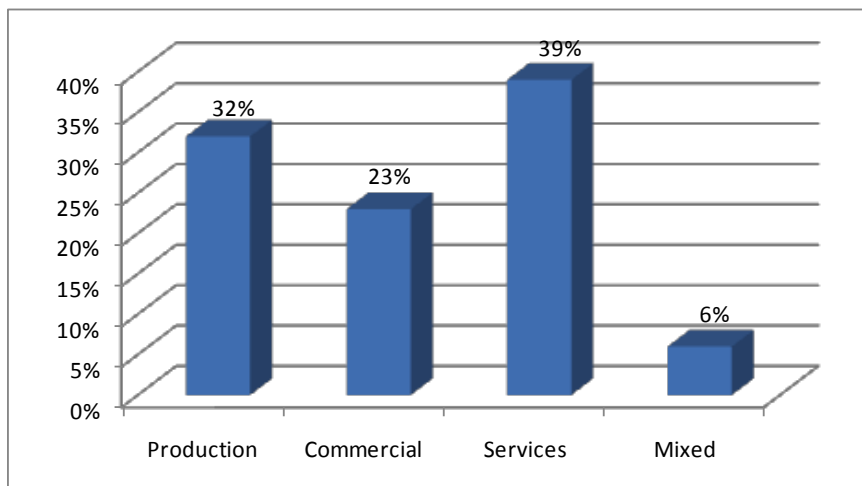
Figure 3. Division of enterprises taking into account organizational and legal form



Source: author's own elaboration based on research

According to the type of business activity, employers that provide services are the most common (39%), commercial companies are less (23%), while the least are companies that combine two or three activities (6%). Figure 4 presents it.

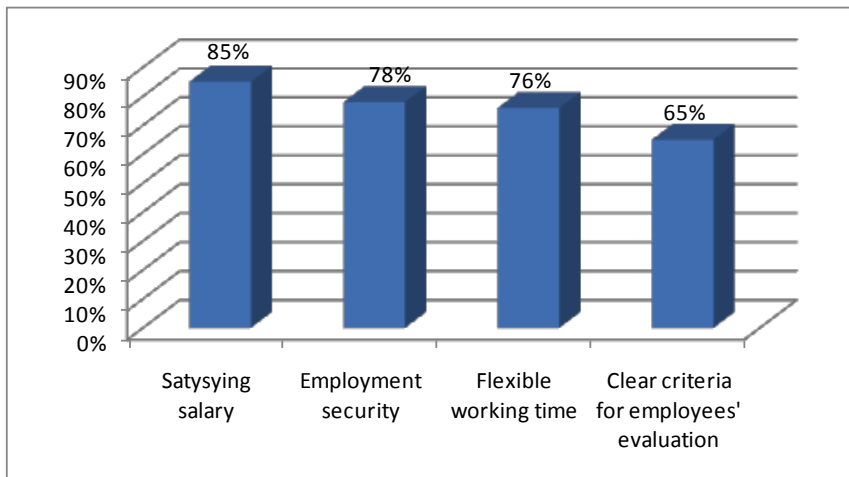
Figure 4. Types of business activity



Source: author's own elaboration based on research

Identification of expectations and their distribution according to its importance for employees was made according to number of indications. Figure 5 presents group of the most important expectations.

Figure 5. The main employees' expectations



Source: author's own elaboration based on research

Identification of employees' expectations revealed that satisfactory salaries are the main purpose of their work (85%). For respondents very important is also employment security, in form of employment contract for an indefinite period (78%), similarly as flexible working time (76%) and influence on its organization (76%). The least of respondents indicated expectations connected with employees' evaluation and almost 2/3 of respondents want to be evaluated according to clearly defined criteria.

Other important factors are:

- Friendly atmosphere at work – 61,
- Impact on choice of co-workers – 61%,
- Training at employer's own expense – 59%,
- Additional social benefits – 50%,
- Supervisors and co-workers' help – 50%,
- Complete information about company's „life” – 43%,
- Health and safety conditions – 41%,
- Protection of trade unions – 9%.

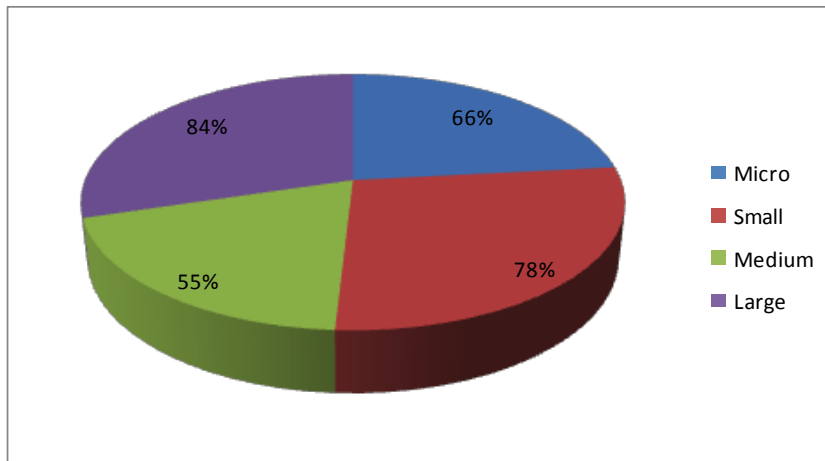
Presence of trade unions are the least important in enterprise (9%).

Purposes important for employees are realized in most companies. More than half of respondents (60%) indicated that their remuneration is adequate to performed tasks. Among women this proportion is slightly lower and amounts to 55%. In this group women predominate (55%) and the employment period is from 2-5 years (54%). For every fourth of them it is the first work and 20% of respondents felt that their employer satisfies all other expectations proposed in survey, with a particular emphasis on:

- training at employer's expense,
- reliable information about the life of the company,
- a friendly working atmosphere,
- additional social benefits.

Figures from 6 to 8 presents enterprises which meet the main expectations of their employees. The first one, figure 6 presents enterprises which meet employees' financial expectations, taking into account their size.

Figure 6. Summary of enterprises which meet employees' financial expectations, taking into account their size

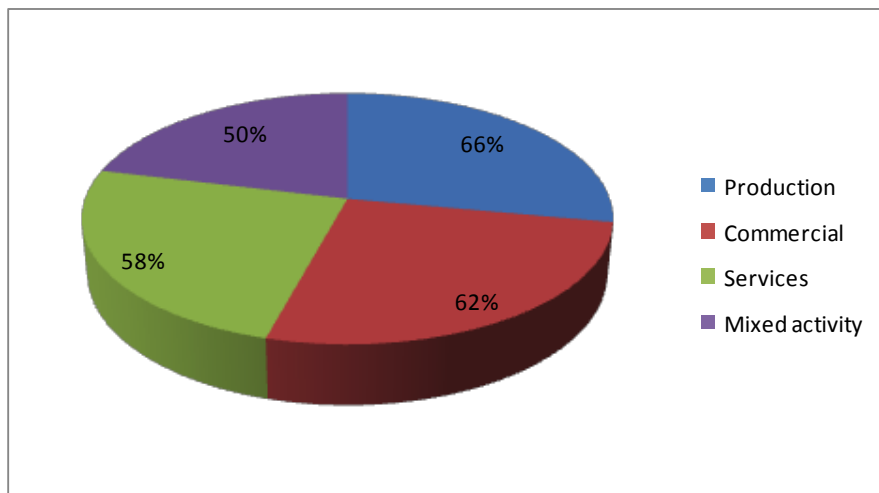


Source: author's own elaboration based on research

Employers who meet the salary expectations of their employees are mainly large companies (84%). The share of small firms is also high (78%), two of three micro enterprises also pays the salaries in line with expectations and the worst situation is in medium-sized companies, where up to 45% of employees think that their salaries are not satisfactory.

While, figure 7 presents Share of employers which pay satisfying salaries taking into account type of their business activity.

Figure. 7. Share of employers which pay satisfying salaries taking into account type of their business activity

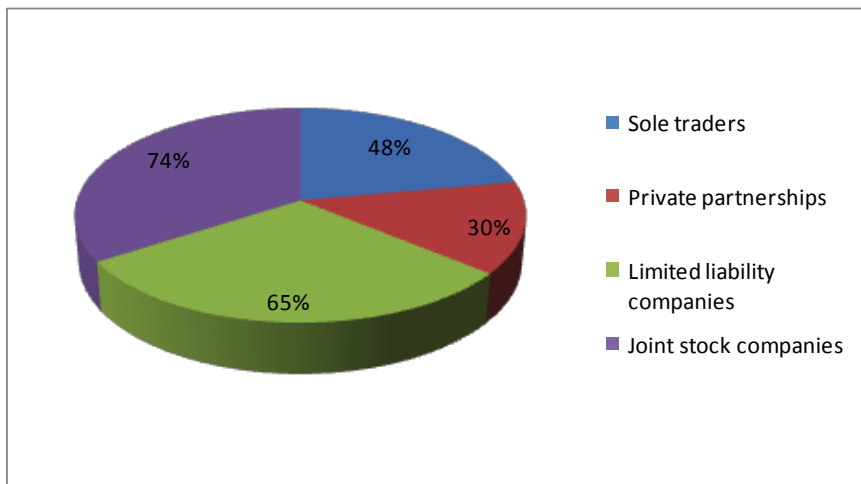


Source: author's own elaboration based on research

Salaries are at the expected level in two out of three entities among production companies. Next are commercial companies (62%) and services are slightly below 60%. The lowest percentage of "generous" employer is in mixed activity companies, but the result may be distorted, because these companies constitute only 6% in the sample.

Figure 8 presents a summary of enterprises which meet employees' financial expectations, taking into account their organizational and legal form

Figure 8. Summary of enterprises which meet employees' financial expectations, taking into account their organizational and legal form



Source: author's own elaboration based on research

Joint stock companies are companies that pay salaries to employees at the expected level in three out of four companies. Equally "good" employers are limited liability companies (65%). The worst situation is in private partnerships where only 30% of employers reward their people justly. Registered partnership was not included in the analysis because it has only one representative.

40% of respondents are dissatisfied with their salaries. They employers are:

- private partnerships – 50%,
- mixed activity companies – 50%.
- medium sized enterprises – 45%,

It should be noted that among dissatisfied employees, there are a little over 12% those who claim that their current employer does not meet any of expectations proposed in survey.

There is also a group of people (9%), who say that only salary does not meet their expectations, and remaining set of wishes is implemented in company. This may mean that current financial situation of company does not allow an employer on higher salaries, and realization of other expectations may indicate that, when company's condition will be improved, the most important purpose - salaries also reaches a satisfactory level for employees.

SUMMARY

Studies have confirmed that financial expectations are the most important purpose for employees from Lower Silesian enterprises. Employment security in form of contract for an unspecified time is equally important, as much as flexible working time and influence on its organization. Respondents also attach great importance to clear criteria for employees' evaluation. Realization of the main purpose occurs in most enterprises and often in manufacturing companies or joint stock companies. Among employees satisfied with obtained benefits from work, women consist a little more than a half. Men are less satisfied. Every eighth respondent was not satisfied with the work, which may mean that these people are looking for a new employer. Lower Silesia is a region where basic macroeconomic parameters in form of unemployment and entrepreneurship indicator are close to the level of the whole country. There is also a border region, where employees have greater job opportunities in German companies. The results obtained can be treated not only as a region.

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Strategies of the slovak food industry enterprises by internationalization of their business activities

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Abstract

Market globalization and production internationalization are the most significant features of the world economic development of the last decade. Globalization impacts have changed the rules of the world competition radically. Under the growth of market globalization, corporations and firms have found out that they are strongly linked to foreign consumers, competitors and suppliers. The aim of the submitted paper is to recognize of the food industry businesses in the SR apply the same strategies by the internationalization of their business activities.

Key words Internationalization of the entrepreneurship, Strategy, Food industry

1. INTRODUCTION

Joint ventures outgrow the frame of the national economies and it leads progressively to the internationalization of the entrepreneurship (Ubrežiová, 2005). Motives of the internationalization are mentioned in the table 1.

Table 1: *Motives of the internationalization of entrepreneurship*

Distinction	Activity	Level
Trade	Export	Commercial
Agreements	Licenses	Contractual
Shareholding	Formation of consortia	Participatory
Integration	Direct production investments	Integrating
Autonomy	Formation of the other firms in all phases of the business activities	Autonomous

Source: Ubrežiová, 2005

According to Sršňová – Füzyová (2000), business internationalization presents overrun its business activities over the national boards.

We consider these factors as a basic factors influencing business internationalization:

- opening of the national economies of the single countries,

- trends in national and international competition,
- sharply increasing expense on the research and development,
- shortening of the life cycle of the products and technologies (high level of the inovations),
- high capital requirement,
- improving of the transportation conditions and relative decrease of the transportation costs,
- development of the information and communication technology,
- enlargement and deepening of the services suitable for internationalization.

2. MATERIAL AND METHODS

The aim of the submitted paper is to recognize of the food industry businesses in the SR apply the same strategies by the internationalization of their business activites. The following hypothesis was determined by the elaboration of this paper:

We assume that businesses apply the same strategies by application of their internationalization activities.

Material used for the elaboration represent primary and secondary sources. Primary sources are created by the data gained by survey. The target group were the 20 largest companies of the food industry according to the rating of the weekly Trend (see table 2).

Table 2: *The largest companies of the food industry in SR*

Number	Company	Sales 2012 (k €)	Sales 2011 (k €)	Change 2012 / 2011 (%)	Net profit 2012 (k €)	Net profit 2011 (k €)	Change 2012 / 2011 (%)
1.	Heineken Slovensko, a.s., Hurbanovo	222 497	203 219	9,5	n	n	n
2.	Amylum Slovakia, s.r.o., Boleráz	217 424	199 779	8,8	18 961	17 100	10,9
3.	Mondelez Slovakia, a.s., Bratislava	205 410	230 814	-11,0	6 762	10 063	-32,8
4.	Považský cukor, a.s., Trenčianska Teplá	202 495	95 002	113,1	22 913	12 239	87,2
5.	Nestlé Slovensko, s.r.o., Prievidza	156 584	153 135	2,3	7 656	6 185	23,8
6.	Rajo, a.s., Bratislava	152 423	139 159	9,5	326	-1 452	n
7.	Slovenské cukrovary, s.r.o., Sereď	116 239	79 761	45,7	10 381	12 652	-17,9
8.	I.D.C. Holding, a.s., Bratislava	97 965	88 595	10,6	4 447	4 407	0,9
9.	Hyza, a.s., Topoľčany	88 394	86 509	2,2	13	-2 779	n
10.	Púchovský mäsový priemysel, a.s., Púchov	77 087	62 908	22,5	330	412	-19,9
11.	Penam Slovakia, a.s., Nitra	68 339	76 225	-10,3	-2 771	-2 133	n
12.	Syráreň Bel Slovensko, a.s., Michalovce	67 966	58 380	16,4	2 879	2 281	26,2
13.	Kofola, a.s., Rajecká Lesná	64 522	61 769	4,5	3 033	1 723	76,0
14.	Agro Tami, a.s., Nitra	64 026	62 787	2,0	304	273	11,4

Number	Company	Sales 2012 (k €)	Sales 2011 (k €)	Change 2012 / 2011 (%)	Net profit 2012 (k €)	Net profit 2011 (k €)	Change 2012 / 2011 (%)
15.	Tatranská mliekareň, a.s., Kežmarok	63 064	59 940	5,2	103	11	836,4
16.	Tauris, a.s., Rimavská Sobota	44 892	39 285	14,3	-116	-2 217	n
17.	Slovenské pramene a žriedla, a.s., Budiš	36 454	29 347	24,2	612	54	1033,3
18.	JAV – AKC, s.r.o., Vlčany	34 957	28 775	21,5	178	146	21,9
19.	Hubert J.E., s.r.o., Sered'	29 159	26 923	8,3	3 281	3 452	-5,0
20.	Baliarne obchodu, a.s., Poprad	27 513	27 111	1,5	2 556	3 004	-14,9

Source: Trend, 2013

13 of asked companies have answered our question. Secondary sources were scientific publications. We have examined the existence of the functionality by the Friedman test. Friedman test is nonparametric analogy of the two-factor analysis of variance with one observation in subclass. Input data are arranged into the matrix of m rows and n columns. Testovacia Štatistika Test statistic of the Friedman test :

$$F = \frac{12 \times m}{n \times (n+1)} \times \sum_{j=1}^n \left[\sum_{i=1}^m T_{ij} - \frac{n+1}{2} \right]^2$$

If the P- value is lower than chosen level of significance (usually 5 % = 0,05), we reject the zero hypothesis.

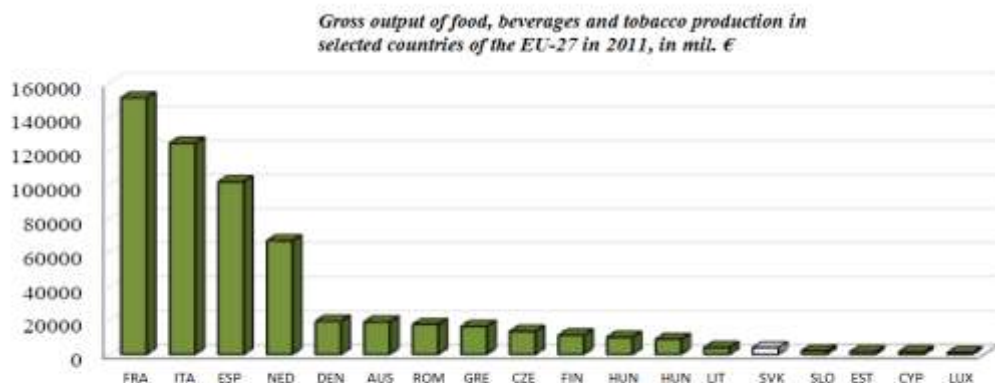
If the P- value is equal or higher than chosen level of significance, we can not reject zero hypothesis.

3. RESULTS AND DISCUSSION

3.1 Food industry in the European union and in the Slovak Republic

Food industry of the European union is within the frame of the industrial production significant branch that has gained turnover of the 960 mld. € what represents 16 % share of the industrial production and 14,6 % share of the employment in the EU. It has gained positive balance of 9,8 mld. € (65,3 mld € export and 55,5 mld € import) by the foreign trade exchange with food products. The most enterprises (99 %) are small and medium enterprises that employ almost 63 % of the labour force and they create 49 % of the european food industry turnover.

The most of gross food production has produced France (151,1 mld. €), Italy (124,5 mld. €), Germany, ie production and flat critical countries (see Graph 1). Sloak republic has gained almost 3,8 mld. € of the food production. The lowest production was in Malta (0,3 mld. €), Luxembursko (0,8 mld. €), Cypress (1,3 mld. €) a Estonia (1,3 mld. €) (Križová – Belešová – Chrastinová, 2013).



Graph 1: *Gross output of food, beverages and tobacco production in selected countries of the EU-27 in 2011, in mil. €*

Source: Křížová, S. – Belešová, S. – Chrástínová, Z., 2013

According to the available data of Eurostat, food industry, i.e. production of the food, beverages and tobacco products in EU countries has participated in national economy in 2011 as follows:

- on gross production from 0,7 % to 7 % (the most Lithuania 7,0 %, Romania 6,6 % and Netherlands 5,6 %, Spain 5,3 %), Slovak republic has participated 2,3 %,
- on production consumption from 0,7 % to 9,4 % (the most Lithuania 9,4 %, Spain 8,0 %, Denmark 7,2), Slovak republic has gained 2,8 %,
- on gross added value from 1,3 % to 6,1 % (the most Romania 6,1 %, Lithuania 4,7 %, Ireland 4,8 %, Slovak republic 1,5 %),
- on employment from 1,3 % to 2,5 %,
- on gross fixed capital formation from 0,9 % to 2,9 % (the most Poland 2,9 %, Lithuania 2,9 % and Italy 2,4 %), Slovak republic is on the level of 1,5 %.

Slovak agrifood complex has considered the entry into the EU as necessary even though it has not brought only positives. The most negative features of the integration is considered to be a the fall in prices of the many first core agrarian products caused by the entry into the open market. The low production quotes and the change of the subsidy system from the continuous to the payment at the ned of the year have also had unfavourable impact. Though the mentioned handicaps, the entry into the EU has brought also the positive effects for the entrepreneurs in the food industry. There is wider possibility of the economic expansion, on the other hand, the competitive pressures have increased (Zentková-Gecik, 2006).

Slovak food industry has priority status by the provision of the health nutrition for the inhabitants. According to the SO SR, food industry (production of the food, beverages and tobacco products) gained in 2012 positive net profit of 195 mil. €. In 2011 food industry (production of the food, beverages and tobacco products) gained positive net profit of 110,3 mil. € (see table 3)

Table 3: *Development of the profit or loss in the production of food, beverage and tobacco products (in mil. €, index in %)*

Indicator	2010	2011	Index 2011/10	Difference 2011-10
Revenues	3 952,9	4 256,2	107,7	303,3
Costs	3 825,1	4 145,9	108,4	320,8
Profit	127,8	110,3	86,3	-17,5

Source: *Správa o poľnohospodárstve a potravinárstve v SR, 2012*

SR has been gaining long negative balance in the commodity trading balance in foreign trade with agricultural and food products. Only in 2011 it has come to the significant and positive decrease of the deficit. Fundamentals of the adverse balance of trade is in the continuously worsening situation in the foreign trade with processed food products. Since 2005, more than 90 % of total agrifood deficit have generated right processed products, in 2009 and 2011 their share rapidly overrun 100 % level (109, 4% or 119,9 %). Significantly negative is developing the foreign trade with substitutable processed products and final food that are possible to ensure by the national production. While in 2012 substitutable food have generated 40,9 % of total negative deficit of agrifood foreign trade of SR, in 2010 75,8 % and in 2011 even 91,1 % (see table 4). It is clear that if the efficiency of the food industry would not grow, the improvement of this situation is not possible to solve by massive increase of the agricultural export as it will lead to further escalation of food import with high added value where the basic raw material would be exported from Slovak republic (Matošková – Galik, 2012).

Table 4: The SR foreign trade with food commodities (thousand €)

	FOOD PRODUCTS						
Import total	1 079 409	2 036 003	2 202 369	2 202 838	2 401 123	2 766 265	256,3
from that substitutable	821 914	1 531 663	1 750 853	1 780 904	2 053 124	2 336 688	284,3
Export total	601 374	1 395 891	1 396 262	1 273 471	1 456 173	1 852 471	308,0
from that substitutable	570 724	1 296 341	1 263 053	1 140 790	1 327 311	1 642 228	287,7
Balance total	-487 035	-640 112	-806 107	-929 368	-944 950	-913 795	191,2
from that substitutable	-251 189	-235 322	-487 800	-640 114	-725 823	-694 460	276,5

Source: *Matošková, D. – Galik, J., 2013*

3.2 Strategies of the slovak food industry enterprises applied by internationalization of their business activities

As the most applied strategies, enterprises apply an effort to distinguish from the competition by quality, trade mark, innovations and sortiment and an effort to build a longterm relations with their foreign costumers. 100 % of enterprises replied by both strategies full agreement with the statement of the strategy formulation.

Another important strategy for surveyed enterprises is *a swift response of the company on the information about negative customer satisfaction*. 11 asked enterprises (84 %) fully agree and 1 enterprise (8 %) agree and 1 enterprise (8 %) partially agree with this defined strategy.

8 enterprises (62 %) fully agree with the statement that *they consider their products as competitive*. The rest 5 enterprises (38 %) also agree with this strategy.

6 enterprises (46%) declared that they fully agree with the strategy by which *they aim to make their products available to the most of inhabitants*. 5 enterprises (39 %) agree with this strategy and 2 enterprises (15 %) partially agree with the application of this strategy.

Next searched strategy was *Top management is focused on the development of the sources needed for achieving the goals on the foreign markets*. 10 enterprises (77 %) fully agree with the given strategy, 1 enterprise (8 %) agree and 2 enterprises (15 %) partially agree with the given statement of the strategy.

As the less applied strategy, enterprises consider the strategy of *competitive advantage based on the understanding of the customer needs*. 7 enterprises (54 %) fully agree with the given strategy formulation, 1 enterprise (8 %) agree with the given formulation and 5 podnikov (38 %) partially agree with the given formulation of the strategy.

We have tested by the Friedman test if in the searched sample of the answer on the single questions about the strategies applied by the internationalization of their business activities found differences could be only random or statistically significant. We tested hypothesis:

H0: there is no statistically significant difference among the individual strategies that are applied by searched enterprises.

H1: there is statistically significant difference among the individual strategies that are applied by searched enterprises. je štatisticky významný rozdiel medzi jednotlivými stratégiami, ktoré uplatňujú skúmané podniky.

Based on the results ($p=0,003$), see picture 1, we can adopt hypothesis H1 – t.j. enterprises apply strategies among them is statistically significant difference. We can state that searched enterprises apply different strategies by internationalization of the entrepreneurship.

N	13
Chi-square	19,636
df	6
p	,003

Picture 1: Results of the calculation of the statistical significance of the differences among the strategies related with the internationalization of entrepreneurship by Friedman test

Source: own processing

4. CONCLUSION

Advancing globalization and internationalization process is related with the penetration of the foreign capital into slovak business subjects and it forces their management to review the realization of the business activities. The base of the internationalization process is in the growing difficulty of the competitive environment on the market. The environment also forms by the partnership and business networks formation. By wider query, the largest food industry enterprises in the SR were searched about the strategies of the entrepreneurship related with the internationalization of their business activities. The most applied strategies are: *an effort to distinguish form the competition by quality, trade mark,*

inovations and sortiment, an effort to build a longterm relations with their foreign costumers and a swift response of the company on the information about negative customer satisfaction. We have found out that enterprises apply different strategies by internationalization of the entrepreneurship. We did not confirm our hypothesis.

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Selected aspects of online p2p lending

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Abstract

Importance of process management in the current period is significantly increasing. One of the main reasons is increasing complexity of system of management in organizations, constant pressure to reduce costs and as well as to optimize production and management processes. In this paper, we focus on online p2p lending system and within that, on the process of the transfer of money, which we analyze precisely through a process map. The conclusion of the paper is about proposing next steps which would eliminate the risks arising in the process of transfer of money within the system of online p2p loans namely the application and effective using of digital signatures.

Key words: digital signature, p2p lending, processes, process management, transfer of money

Introduction

During the last decade of 20th century, there was general opinion, that old way of organizational management is insufficient in new conditions. Organizations cannot be managed on the principle of strictly defined administrative structure, in which each employer has defined position, responsibility and based on that, pertained rights. Company based on this parameters was inflexible, absenting variation of techniques and methods in management. Last but not least, it did not motivate employers on any hierarchical level to have creative approach as there was inefficient motivational system. Strictly set hierarchical structure, defining remits and responsibilities, communication procedures, rewarding system, as well as system of promotions was common in the past. But today it is indispensable to substitute old organizational hierarchies by new hierarchies with focus on processes, while there is natural need to make a detailed map of processes with more inputs and outputs creating the value for customer. It is necessary to understand processes intentionally , what means, that we devote them in order that inputs would be transform into outputs , not just because there were performed "some"

activities. Processes must be understood in relation to each customer (as through them is creating customer value). We are getting to the essence of the processes and their hierarchy - the main, the key chains of processes are those activities, within which are creating customer values, while the function of other processes is supporting the main process. It can be stated that the processes and their relationships form the basis of an organization, everything else has the nature of infrastructure and is only derived from the main structure of processes: communication and organizational structure, information system and other potential technologies. (Řepa, 2006) If processes should have sufficient flexibility to reflect the changing nature of customer needs and circumstances of the market environment, they must have sufficient flexibility and derived infrastructure. In terms of organization, this means to leave strictly defined structure of superiority and subordination, as these relations must always be assigned according to the purpose within that process. That requires the delegation of decision-making power according to the need of process. In the field of supporting technologies, adaptation to the process changes means mainly finding attributes of process, organization and communication, which are generally valid and which are at least related to the need of change. There is also needed to separate them from those which are more specific. On the one hand, that brings the need to standardize the corporate system, on the other hand, it brings a strong need to pay adequate attention to the non-standardized processes, as they require, from the qualitative point of view, completely different support (must be specifically supported).

1. System – components - modelling

The principle of modelling is one of the basic principles within the method of conceptual design of the system. Methodology and characteristics of tools and techniques are based on the premise that the analyzed system is a model of the real system (real world), the information in the system is not created, but it is only mediated by the system, because the system provides information about its environment, so about the real world, not about itself. The structure and content of the individual components of the system are set by the structure and content of the individual components of reality. The task of the system is, according to the information what is happening in reality, provide the same information in the relationship between the various components of reality. Inputs into the system represent information about what is happening in reality, as well as outcomes, but in different - demanded structure. Information is not changing, but its value during processing in the system increases, as we are putting them into the mutual relations on the basis of knowledge about the structure of reality.

Hierarchical abstraction in modelling

Hierarchical abstraction represents a tool of decomposition of components in the developing system into more detailed level of view. The higher level is a conceptually superior to a lower level. At each level are described components and the relationships between them. Řepa (2006) defines two basic types of hierarchical abstraction:

1. Abstraction "part - complex" (collectivization, aggregation) - this abstraction has its typical use in a functional model, where the system is divided into subsystems, parts of subsystems and other parts. For aggregation is typical of fundamental unlimitedness of division. Higher complex is defined as the sum of its parts.
2. Abstraction "specific approach - a general type" (generalization). This abstraction is typically used in data model where it is possible to think about individual specific variants of superior conception (entities, object). Unlike aggregation, the superior complex is not defined as the sum of subordinate components, but as a carrier of their common characteristics (attributes).

In general, we can apply object and process view to the real world. While object view emphasizes the essence (structure) of reality, process view is focused on the behaviour of reality. Also the object model describes the behaviour and we can describe it by the form of "life cycles of objects". Mainly the

behaviour of individual objects is visible, but the behaviour itself does not clarify the reasons leading to the activity. In the process view, there is necessary to find a superior reason for this behaviour, which is independent on the general rules of life of individual objects. This means that for each process has to exist a reason supported by a purpose, goal or also external impulse. Professional literature presents several methodologies used for modelling business processes (Řepa, 2006; 2007). In general, we can decomposed the analysis of processes into three basic phases that form a coherent complex.

- analysis of elementary processes ,
- specification of the key processes,
- specification of supportive processes .

The result of the analysis of elementary processes are mapped elementary processes in terms of their structure, relations between them, and all of that according to the analysis of events and reactions, as well as relations between them. Similarly, in the analysis of key process we are focusing on mapping the structure and the relations between them and the important components of key processes. The analysis is based on object analysis of products or services and it represents the next step after the first phase - analysis of elementary processes. Next step should be specification of supportive processes, which is aimed at the analysis of supportive processes, structure, their essential attributes, as well as their reciprocal relations. (Réveszová – Pařová, 2009; Řepa, 2007)

Our ambition was to focus on a specific type of processes within online p2p lending system, which is currently highly topical, what is caused also by the recent economic crisis, which contribute to development of alternative forms of financing.

2. P2P lending system

Development of online p2p lending system, called also as online community loans, in recent years was based mainly on development - increase in the use of new information and communication technologies that enable communication between users from different places. New technologies have so enabled creating markets composed of borrowers (people with temporary lack of funds) and investors (people with surplus funds seeking profitable form of investment). As the attractiveness of the market has raised, many new companies started to operate also like p2p lending mediators focused on profit or more on social character. To early adoption by inhabitants of several countries contribute also many advantages of p2p lending in comparison with loans from classic financial institutions – banks and non-financial subjects. Just to mention a few - low operating costs, no difficult administration or feeling that you are helping a concrete person with your investment. So the trend of raising the communities was set and it enables better reallocation of sources not only within one country.

If a person has more finance than he actually, they are usually thinking what to do with them. Over the years, there has developed a whole range of investment opportunities, but the basic criteria for comparison are still two main - the rate of return and the level of risk. Naturally when someone postpones current consumption he should obtain a reward what brings them the possibility of increased consumption in the future and that is represented by appreciation of the investment. In case, an individual does not have enough financial resources to cover their needs, they usually seek for opportunities to borrow from other economic entities for a certain period of time. In the past, borrowers asked mainly family members or friends as the creditors. Later appeared other subjects - banks and other financial and non-financial institutions enabling transfer of funds from lenders to borrowers.

Bank can be characterized as a financial mediator, which main activity is enabling the transfer of funds between economic entities , and such activity is based on its rights as a bank, to take deposits and provide loans. (Revenda a kol. 1996) As a bank provides clients - creditors much lower interest rates in comparison with other clients - debtors, this difference becomes income of the bank. (Kumar 2007)

Some authors, e.g. Hulme and Wright, say that traditional banks are dependent on customers who are unable to pay their debts, and the main part of banks' income is made by additional fees, fines from just this type of customer. Besides banks, there are a few types of financial and non-financial institutions providing different forms of loans, mostly short-term loans or leasing-products allowing the purchase of goods without immediate payment of the full sum.

Specific form of a loan provided from people to people - via p2p lending systems. In the past, this type of loans was provided usually by family members or friends. With development of new technologies, people started to use internet also for communication related to loans and also as virtual place for meeting and pairing demand and supply of investors and debtors.

2.1. *Classification of online p2p lending systems*

Today, we distinguish 3 main types of online p2p lending models:

P2P lending focused on social character

First impulse to their creation was aim of help, support of poor countries, especially in Africa and Asia. Thanks to that there is able to reallocate resources in more efficient way, via transferring money from developed to developing countries. There are a few concrete forms of loans but usually their characteristics are like small amount of money, very often for purpose of starting a business. Interest rates in this case are also very low. Known companies in this sector are e.g. Kiva or Zidisha. In the past, this type of lending was provided also by some classic banks (e.g. Grameen Bank - the first banks which introduced the concept of p2p lending in Bangladesh). (Collier, Hampshire 2010)

Model „person - person“ focused on profit

Today the most popular model of online p2p lending, which is based on lending from one physical person to another with main purpose of profit. The social aspect is still there, but motivation of lenders is strongly influenced by potential reward as well as one of a provider of services. So the loan has usually higher interest rate than one in model focused on social character. Loans are also little higher and all subjects included are usually residents of one country. In case of international cooperation, there would be needed more sophisticated solution when talking about the legislative issues as well as the aspects of risk management. (Ashta, Assadi 2009) Anyway there is one example from Estonia – Isepankur – which was founded with the purpose of building connection for clients of eastern Europe.

Model „company – person“

This, the least popular model, allows companies to raise capital from individuals. These are mainly start-ups on the market who are seeking for capital. It is a form similar to investing in the stock market of emerging companies, as repayment of the loan depends on the fact whether the debtors products or services will be successful or not. As a result, the form of investment identified as highly risky. Some companies, despite being several years on the market use also this form of financing as an good alternative to conventional loan.

Picture 1 Three main types of p2p lending systems

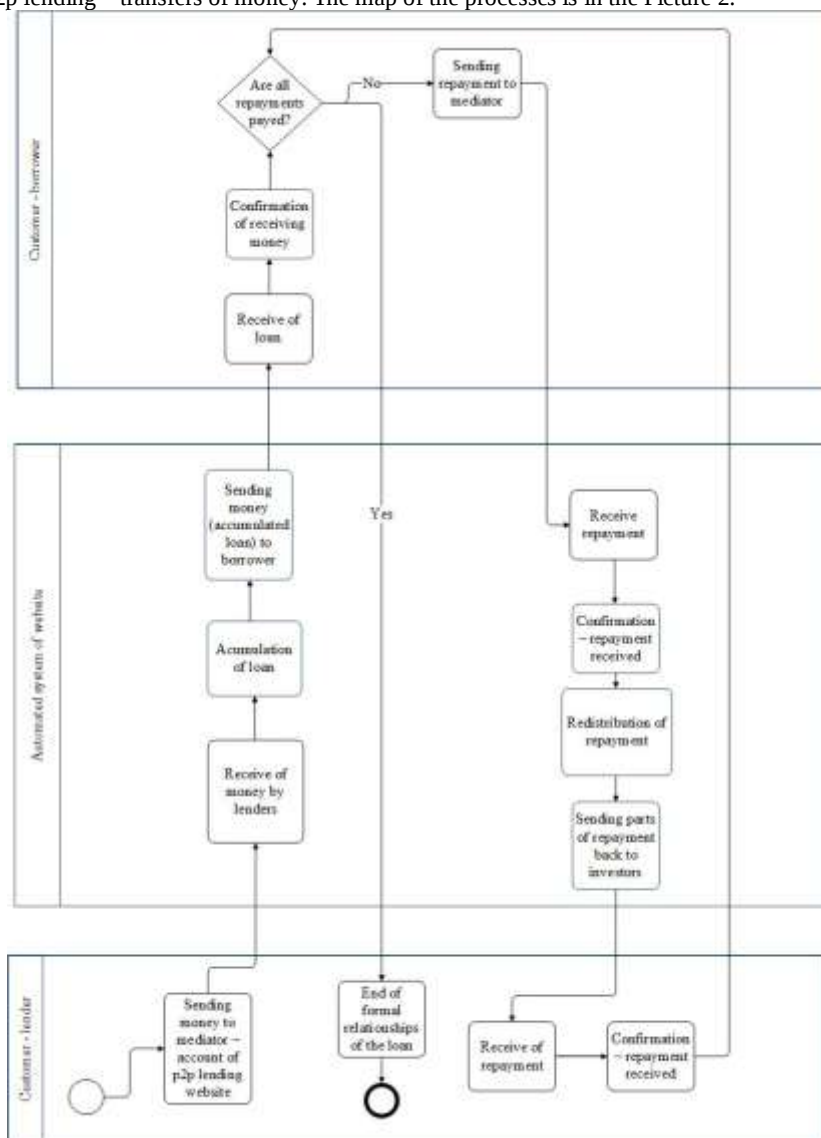
Source: Own proceeding

A brief description of online p2p lending system clarified basic aspect of the system and pointed out that during recent years, a few alternatives and aim groups of customer has been developed. There are some differences when comparing them, but they have also some typical attributes which we can see

in each case like e.g. auction mechanism, which enable pairing of demand and supply and more effective allocation of sources – gained thanks to competitiveness on the market.

2.2. Specification of selected process within system of p2p lending

According to the aim of the paper we focused on selected type of processes within system of online p2p lending – transfers of money. The map of the processes is in the Picture 2.



Picture 2 Process map of transferring money

Source : Own proceeding

As it is obvious from Picture 2, at the beginning of the process, investor sends money to the mediator's account, who then adds them to sources of other investors, creating the accumulated amount of the loan, which is in the next step sent to the debtor. This subject - borrower later, based on time defined in agreement, is sending back regular payments. These payments are then reallocated to investors. The cycle is repeated while all repayments are paid. The final activity is ending of relations based on a specific loan agreement.

Thanks to composition of the process map, we can see the current setting of the system, which is today very common for many p2p lending websites. As we can see there are needed many transfer of financial sources within actors - lenders, borrowers and websites. This solution is needed especially because of security – when money is transferred via mediator, they are sure, if the client really has sent it or not. But the price for this certainty is relatively high, since it is necessary to pay a fee for each transfer of money and so profitability and also attractiveness, from the clients' point of view, is decreasing.

Naturally the question comes up, what are the options to simplify the process and increase the efficiency and attractiveness for investors as well as for borrowers.

2.3. Digital signature and online p2p lending

One of the possibilities that could be applied to processes within system of online p2p lending is a digital signature. Digital signature and its use is in actual Slovak legislative described in the law number 215/2002. In this law is stated that digital signature is an information connected or logically linked with electronic document and it must be valid for it that:

- It is not possible to create the information without knowledge of private key,
- When knowing the information and public key pertained to private key used when creating the information, there is able to verify if electronic document to which the information is connected or linked with it, was or not changed after its creation.

Another type of description provide e.g. Bucko who described digital signature as own long and difficulty generated numbers, which are made by processor of computer or chip card. (Bálint, Bucko 2009)

Use of electronic signature is linked not only with the transfer of funds, but also with other processes within the system of online p2p lending as the digital signature is an alternative to traditional handwritten signature. The application of digital signature within the system of online p2p lending would allow mean a few new opportunities like e.g.:

- Faster and easier process of verification the identity of clients, which is usually made via post office services. It could be used in order to confirm identity of clients as well as for confirmation of fact that document was really released by particular subject and was not changed on the way to recipient. In comparison with classic handwritten signature, verification in the case of digital signature in controversial situations is not so difficult and expensive. In the case of handwritten signature only expert can make validation, as each signature is always unique, because it is not only the combination of characters created by mathematical processes like digital version. There is also the issue of probability of failure in case of signature made personally. On the other hand, verification of electronic signature is a process resulting says yes or no with 100% certainty. (Delina, Vajda 2008)

Of course represent additional time and financial costs for p2p lending company. Secure digital signature would mean additional costs also for clients. This could lead to lower attractiveness, but on the other hand there is very important to point out the fact, that also government administrative and generally all administrative activities are meant in the future to

be held via digital signature. So the tool of it can be used by clients also for other purposes in the future, and so for one expense, they can potentially use it for many times, many purposes.

- Speaking about the transfer of funds, there would be no need for accumulation and subsequent redistribution of payments flow from lenders to borrowers and vice versa, as transfers of money could be verified via electronic documents secured by digital signature.

What should be not forgotten, achieving the benefits of implementing the digital signature is able only when also banks, which are complementary subjects in online p2p lending (Rumiany 2007), start to use it. It is needed as only providing secured confirmation of money transfers by banks allow p2p loans mediator to enable direct transfer money from borrowers to lenders and vice versa. Without this tool, there could be a situation of two opposing statements about money transfers, when one side confirmed money was sent and another side of transaction, that money was not received. Such a situation can be solved very fast and simply via digital signature, as document signed with digital signature would guarantee that a client or other entity did not change the document and it has the form and content as it was given by a financial institution.

Conclusion

Based on theoretical and practical experience we have, we focused in this on the description of process management. In the first section - introduction, we highlighted its importance today, while the accent was mainly on the individual components of process management and correlation between them. In the analytical part, our attention was focused primarily on the selected type of financial process within online p2p lending system, whose importance in the current economic crisis continues to grow. It is related also to the increasing complexity of management of financial processes, as well as the emerging trends to financial innovation. Due to the content and extent limitation of the paper we focused on the process of transfer of money, which clearly describes the process map. Its importance results not only from better imagination, but also from the fact that it enables to understand the components of individual processes and the relations among them, to identify relatively weak components in the process and thus support efforts to eliminate them. In our case, we identified weaknesses in this type of process in the absence of an digital signature.

As we described, the application of electronic signature would allow considerably simplify the processes particularly in terms of institution – the company providing services in the system of online p2p lending. As it is obvious, the act of application would mean additional costs – investment. But from long-term point of view, we think it would be effective and it would lead to lower operational costs of company as there would be no need to many transfers of money via account of p2p lending mediator. On the other hand it is true, that using of digital signature need to be analysed from customers' point of view as it would mean additional costs for them, especially for borrowers who would be pushed to decompose the repayment and sent it to each lender separately. And here comes a question of attractiveness, as costs for them are becoming higher and so it leads to worse position in comparison with other lending products from financial and non-financial institutions. Secondly, equally important issue is the current legislative in a country. EU countries moving towards digitalization of all administrative issues and so there is prediction that digital signature, or other tool very similar to it, will be used in all countries of the Union during next years. Today, not all countries are on the high level of digitalization like e.g. Estonia. But according to many statements by institutions of the EU as well as national institutions, we believe, in the near future, development in the field of digital identity and security will speed up and new opportunities also in connection with online p2p lending will come up.

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Implementation of special graphical method in the technical financial analysis

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Abstract

Overall state of the economy determines the ability of businesses to achieve the desired return. Essential part of financial management is a qualitative and quantitative economic analysis. Under current conditions, statistical methods are an essential tool in almost all areas of social life. Specific syntheses of intuitive and exact methods are some types of mathematical and statistical models in the area of financial management as a subsystem of the overall system of corporate management. The purpose of this document is to implement the chosen methods of technical financial analysis, to highlight the use of elementary statistical methods and statistical characteristics as well as highlight the application and use of the Z-diagram in financial and economic analysis of the production business undertaking.

Key words time series, diagram, business subject

INTRODUCTION

To predict the future development of the economic or financial variables it is necessary to record their progress with increasing time. If the databank of recorded data has a sufficient amount of records, it is possible to model predictions of future development by using existing technical tools for time series analysis. These include nonlinear models of stationary, non-stationary and seasonal time series, nonlinear models with varying modes, linear and nonlinear volatility and models of multivariate time

series. In practice, businesses can encounter several methods, but the simplest method for quantifying the linear model, or non-linear model which can be linearized, is the method of regression analysis.

1. TIME SERIES

Time series are generally understood long time records related to the most diverse comparison. Time series result from the interaction of multiple effects on an observed variable. It is characterized in a number of ways. By Chlebíková (2009, p. 124), "time series is a sequence of values on certain quantitative phenomenon, which are arranged chronologically in time and which we will mark as y_t , for time points $t = 1, 2, \dots, n$."

(Chajdiak, 2009) describes the analysis of time series into several steps:

- obtain the values of the time series,
- graphically present the evolution of the time series,
- specify, if there are phases in time series,
- specify, if there is a trend in time series,
- specify, if there is seasonality in time series,
- estimate the future development of the time series,
- assess the reliability of future development estimate,
- assess the general nature of the variability in the time series.

Time series is usually broken down into four basic components, which result from interaction of character due to time movement. Some of the most simple time series models:

Additive model

$$y = T + C + S + N$$

Multiplicative model

$$y = T \times C \times S \times N$$

Trend function can take various forms, eg.:

Model of constant change

$$y = a + (b \times t), \quad t = 1, 2, \dots, n$$

Model with proportional growth rate

$$y = y_0 \times (1 + g)^t$$

Model of quadratic trend

$$y = a + (b \times t) + (c \times t)^2$$

Exponential trend model

$$y = a \times e^{b \times t}$$

Trend Component (T) signaling the expansion, stagnation, recession is the result of movement caused by long-term trend of development. Cyclic component (C) is longer than one year. Seasonal fluctuation (S) is characterized by recurrent fluctuations during the year. Random fluctuation (Residual, N) is a result of random interactions and impacts incurred. The trend is set by graphic equalizing time series, the method of moving averages, trend (regression) function.

2. ANALYSIS OF Z - DIAGRAM

Diagram Z as the method used in the analysis of time series is indicated for monitoring the development of the planned items and their comparison with desired trend. Its name resulted from the chart, which is shaped as letter „Z“. Even though the diagram is peculiar, it can be applied almost anywhere. According to Wisniewski (1996, p. 73) it can be no doubt that managers, in terms of their goals, wish to monitor the amount of items, for example volume of production, costs, revenues and number of customers and so on. Z diagrams can be constructed for daily, weekly, monthly, quarterly, half-yearly and other intervals.

Table 1 Values of Z-diagram

Quarters (2009-2011)	Normal values (conventional)	Cumulative value	Moving totals	Centered moving totals	Moving averages
1	353,92	353,92	-	-	-
2	420,06	773,98	-	-	-
3	416,67	1190,65	1623,79	1687,355	421,8388
4	433,14	1623,79	1750,92	1807,95	451,9875
1	481,05	2104,84	1864,98	1893,55	473,3875
2	534,12	2638,96	1922,12	1995,73	498,9325
3	473,81	3112,77	2069,34	2121,965	530,4913
4	580,36	3693,13	2174,59	2160,975	540,2438
1	586,30	4279,43	2147,36	2156,7	539,175
2	506,89	4786,32	2166,04	2141,565	535,3913
3	492,49	5278,81	2117,09	-	-
4	531,41	5810,22	-	-	-

Source: Own processing

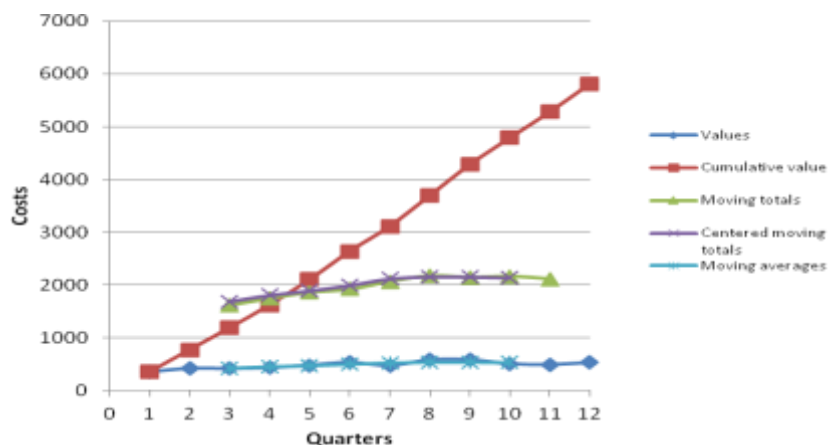


Figure 1 Z diagram of company

Source: Own processing

On the basis of quarterly data for the period 2009-2011 on the cost in tens of thousands of euros, in the analyzed company development trend and seasonal effect are detected. Based on the trend, the costs are predicted for each month next year. For better orientation, the Z diagram is shown in picture 9. During the monitored period, a quadratic model function was determined by regression statistics. Coefficient of determination reached $R^2 = 88.10\%$, the correlation coefficient is 77.63% on significance level $\alpha = 0.05$, $p = 0.001$, which is less than 0.05 . Appropriate model, second-degree polynomial function is designed in the form:

$$y = f(t) = 304,82 + (50,40 \times t) + (-2,74 \times t^2).$$

Based on the equation, column 9 is indicated in rows 2, 3, 4, 10 (equalized values). In row 9, deviation s_2 is determined as difference of period average and average of equalized values. Based on obtained information, row 10 is set, where expected costs of company are specified in the respective quarters of 2012.

Variables 1a, 1b, 1c represent quarters of 2009 to 2011. Average $\bar{y}$ (473.76) is determined from first quarters of 2009-2011. The amount in the sixth row is determined by the sum of the second to fourth row of the respective column.

Deviation in the seventh row, s_1 , e.g. $(-10,43) = (473,76 - 484,19)$, is determined as the difference of $\bar{y}$ and $\bar{y}_i$. The second to fourth row in the eighth column is determined as the average of each quarter (1a, 1b, 1c), the following actual data are shown in picture 10. Entry in the fifth row and eighth column (484.19) is the average of the individual averages in quarters of 2009-2011. The values in the eighth row, of third to sixth column are determined by the difference of function $y = f(t) = 304,82 + (50,40 \times t) + (-2,74 \times t^2)$ and deviation s_1 , e.g. $452,21 = 304,82 + (50,40 \times 4) + (-2,74 \times 16) - 10,43$. The values in the ninth column are the settlement and are shown in picture 10. The values of the time series in the first quarter of 2012 are presented in the tenth row, e.g. $543,54 = 304,82 + (50,40 \times 4) + (-2,74 \times 16) - 80,90$.

Table 2 Regression Statistics

Multiple R	0,881093492
R Square	0,776325742
Adjusted R Square	0,726620351
Standard Error	36,41197834
Observations	12

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	41415,13	20707,57	15,61854216	0,001183783
Residual	9	11932,49	1325,832		
Total	11	53347,62			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	304,8204545	37,63282895	8,099855	2,00436E-05	219,689081
X Variable 1	50,40186314	13,30987977	3,786801	0,004303768	20,29282328
X Variable 2	-2,736878122	0,996684877	-2,74598	0,022625068	-4,991535956

Source: Own processing MS Excel

Tab. 3 Values of time series

	1	2	3	4	5	6	7	8	9
1		sign	months				Σ	average($\bar{y}_i$)	$y = f(t)$
2	2009/1a	1	353,92	420,06	416,67	433,14	1623,79	405,95	352,4854396
3	2010/1b	2	481,05	534,12	473,81	580,36	2069,34	517,34	394,6766683
4	2011/1c	3	586,3	506,89	492,49	531,41	2117,09	529,27	431,3941409
5	average	$\bar{y}$	473,76	487,02	460,99	514,97	1936,74	484,19	392,85
6	sum	Σ	1421,27	1461,07	1382,97	1544,91	5810,22	1452,56	1178,56
7	$\bar{y} - \bar{y}_i$	s_1	-10,43	2,84	-23,20	30,79	-	-	-
8	2012	4	452,21	465,48	439,44	493,42	-	-	462,64
9	$\bar{y}$ - settlement	s_2	80,90	94,17	68,14	122,12	-	-	365,33
10	2012	4	543,54	556,81	530,78	584,76	2215,88	-	

Source: own processing

Tab. 4 Values settlement

Term	Months				Sum
1	433,39	446,66	420,62	474,60	1775,27
2	475,58	488,85	462,81	516,79	1944,04
3	512,30	525,57	499,53	553,51	2090,91
4	543,54	556,81	530,78	584,76	2215,88

Source: own processing

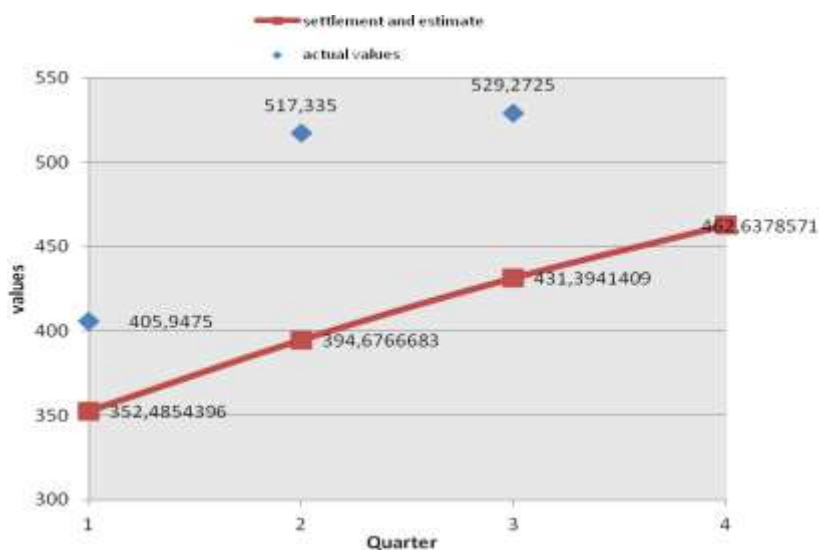


Figure 2 Settlement and estimate of company production

Source: Own processing

CONCLUSION

In this document we have used the basic statistical characteristics and methods that are used in several areas of the business entity. The expert, accountant or financial manager implements the Z diagram into the company for explanatory capabilities. Produced results, findings and conclusions of the technical financial analysis help in generating development concepts, options strategies as well as the planning of all financial aspects in the short or long term. Use of statistical methods by financial managers in practice requires knowledge and understanding of mathematical statistics, just as mutual logical connection of statistics and economy.

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The analysis of the export competitiveness of the agricultural production of the Slovak Republic in relation to third-country markets

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Abstract

Globalization of the economy has added many new challenges for agribusiness around the world. Agribusinesses need not only to compete in their domestic market, but also to compete in foreign markets and develop strategies to induce new customers in new markets to buy their products. The survival and success increasingly depends on competitiveness, thus the ability to compete, in these turbulent times. In our study, we focused on the analysis of the competitiveness of the agricultural production of Slovak Republic. We analyzed the competitiveness of agricultural sector for the period from 2007 to 2012.

Key words competitiveness, agricultural production, Slovak Republic, RCA 1 index

1. THEORETICAL FRAMEWORK

Globalization of the economy has added many new challenges for agribusiness around the world. Agribusinesses need not only to compete in their domestic market, but also to compete in foreign markets and develop strategies to induce new customers in new markets to buy their products. The issues of competitiveness and comparative advantage have become very important for agribusiness managers and government, too. These two issues have important implications for both, the society and its business organizations. At the organizational level, companies cannot sustain their survival and growth without producing and marketing competitive products and services. (Esterhuizen & Royeen, 2006).

The survival and success increasingly depends on competitiveness, thus the ability to compete, in these turbulent times. The term competitiveness has been defined by many researchers as a multidimensional and relative term. It comes from the Latin word "competer" which implies participation in the commercial rivalry on the market. The importance of the various criteria of competitiveness varies with time and context (Ambasatha & Momaya, 2004). Because this term has never been in the economic literature consistently defined, it has many different meanings. The competitiveness as such, can be understood to:

- macroeconomic and
- microeconomic level (Knoll, 2008).

Macroeconomic concept of competitiveness constitutes the ability of businesses in the whole economy to compete through the price or other characteristics of goods with companies based in other countries. Perhaps the biggest controversy in examining international competitiveness is whether it can be ever examined at the macro-level, respectively, whether such research has ever sense. The theory which is related to national competitiveness is the "bottleneck" and there are significant cognitive gaps (Baláz & Hamara, 2012). The opinion that the concept of competitiveness does not make sense in applying at the national level and therefore its practical use is not justified, is confirmed by a number of renowned economists.

In contrast to the macroeconomic view on the issue of competitiveness, microeconomic concept is focused on competition of the manufacturers on the market of the products and services. For the competitiveness measurement at the microeconomic level is needed to calculate indicators such as: given market price, the total cost in domestic prices, the marginal and average cost, the cost per unit of labor force, the market share and other (Knoll, 2008). The proponents of the microeconomic concept argue that those who compete among themselves are not countries but corporations and companies and therefore it is necessary to examine the competitiveness mainly at the company level or at the level of whole industrial sectors (Baláz & Hamara, 2012).

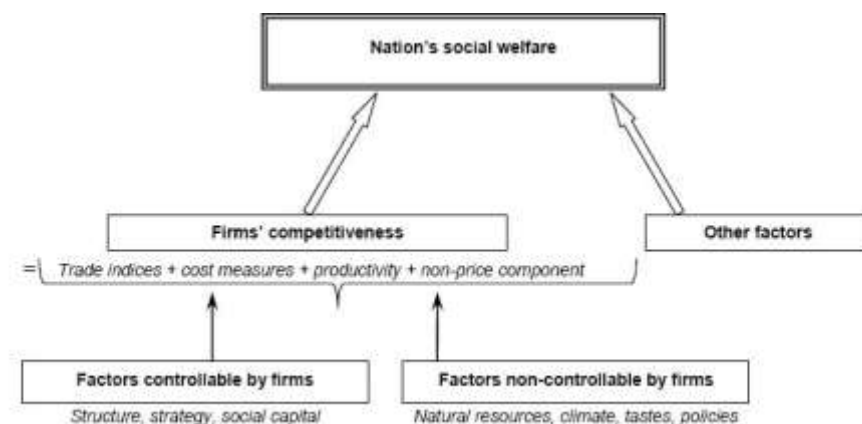
Competitiveness is the concept which is focused on the business ability, productivity, and performance of the firm, sector, or country in a comparative manner. International competitiveness (also global competitiveness) can be viewed along three key dimensions:

1. **Company competitiveness:** represents namely the ability to design, produce, and/or market products superior to those offered by competitors, considering the price and nonprice qualities;
2. **Sector competitiveness:** represents namely the extent to which a business sector offers potential for growth and attractive returns on investment;
3. **Country competitiveness:** represents namely the extent to which a national environment is conducive or detrimental to business (D'Cruz & Rugman, 1992; Mittal & Momaya & Sushil, 2013).

The country competitiveness is gaining importance across the world in the face of complex economic challenges. A relevant definition of country competitiveness created Momaya (2008), which is as follows: the capabilities of a country to nurture industries, segments or organizations, and firms that produce goods and services that meet the needs of domestic and international markets and generate relatively high factor employment and income levels, while citizens earn a standard of living that is both rising and sustainable over the long-run.

The overview of the measurement, determinants and effect of competitiveness is shown in figure 1. The competitiveness of a country is also affected by the production sector and its competitiveness. The competitiveness of enterprises is affected by the factors controlled by the firm such as: structure, strategy and social capital; and also the factors uncontrolled by the firm such as: natural resources, climate, tastes or policies.

Figure 1 Measurement, determinants and effect of competitiveness



Source: Latruffe (2010).

2. MATERIALS AND METHODS

The competitiveness can be evaluated at the different levels of the economy: at the level of the product, the enterprise, the industry and the country's economy. In our study, we focused on the analysis of the competitiveness of the agricultural production of the Slovak Republic. We analyzed the competitiveness of agricultural sector for the period from 2007 to 2012. We used the most recent available data published by the Statistical Office of the Slovak Republic.

Table 1 The value of exports in the period from 2007 to 2012 (mill.EUR)

EXPORT	2007	2008	2009	2010	2011	2012
SITC (0+1)	1766	1727	1615	1800	2327	2688
SITC (2+4)	1112	1366	1029	1402	1678	2026
TOTAL	47 350	49 522	39721	48272	56 783	62 144

Source: Statistical Office of Slovak Republic. Own processing.

Table 2 The value of imports in the period from 2007 to 2012 (mill.EUR)

IMPORT	2007	2008	2009	2010	2011	2012
SITC (0+1)	2453	2597	2511	2807	3247	3341
SITC (2+4)	1466	1667	1144	1927	2216	2425
TOTAL	48 075	50 280	38775	47494	55 768	58 588

Source: Statistical Office of Slovak Republic. Own processing.

In this paper we have used the following logical scientific methods: analysis, synthesis, graphical methods and the numerical calculations using RCA 1 index (Index of revealed comparative advantages). The index of revealed comparative advantages is an index used in international economics for

calculating the relative advantage or disadvantage of a certain country in a certain group of goods or services. It was based on the Ricardian concept of the comparative advantages.

$$RCA\ 1 = \ln \left[\left(\frac{x_{ij}}{m_{ij}} \right) : \left(\frac{X_j}{M_j} \right) \right]$$

when: x_{ij} – export of country j in the commodity group i ,
 m_{ij} – import of country j in the commodity group i ,
 X_j – total export of country j ,
 M_j – total import of country j .

If is the index:

- $RCA\ 1 > 0$, than the country has a comparative advantage;
- $RCA\ 1 < 0$, the country has a comparative disadvantage for the export of this commodity.
- If the result is equal 0, then there is no comparative advantage or disadvantage (Bielik & Rajčániová, 2004).

We used SITC classification, which is the most commonly used classification. Standard International Trade classification (SITC rev. 4) of the United Nations (UN) allows us to compare statistics of foreign trade on a worldwide basis. The agricultural production is included SITC 0 (Food and live animals), SITC 1 (Beverages and tobacco), SITC 2 (Crude materials, inedible, except fuels) and SITC 4 (Animal and vegetable oils, fats and waxes).

3. RESULTS AND DISCUSSION

Slovak economy is in the present the open economy with the small internal market. From this reason the economical efficiency and mostly efficiency of agricultural sector is sensitive on outside environment, it means on global trends in the world economy and development in the European economical space. With Slovak economical development since the year 1989, the relative significance of agricultural section in the Slovak economy has decreased (Bielik, & Gurčík & Horská, 2004).

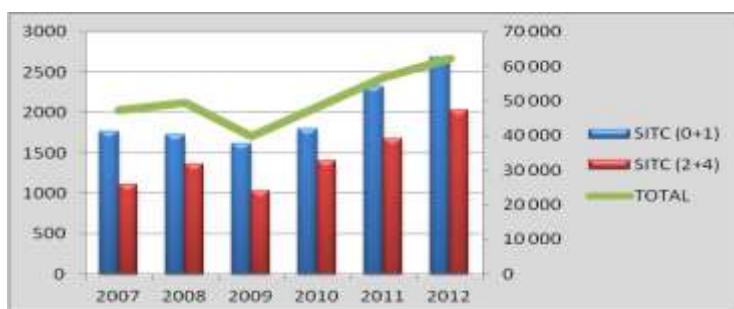
The state interest of the Slovak Republic is the development of productionally executive agriculture, ensuring nationwide, effective and efficient management of land resources of the country and the availability of food for the population. The agriculture uses and restores the natural resources and ecosystems (with forestry) operating actively in nature and environment as well as the economic and social conditions of rural life (Ekonomický ústav SAV, 2010).

The issue of competitiveness in Slovakia was opened during the transformation of the Slovak economy and preparation for EU accession. After Slovakia joined to the European Union have begun for us and for other new member states to run the benefits associated with the liberalization of the mutual trade exchange and the introduction of support systems provided by the Common Agricultural Policy (Bujňáková, 2010).

In the era of globalization of the world economy, it is necessary to evaluate competitiveness of agri-food products in the context of total world trade. On figure 2 are shown the value of exports of goods of the groups SITC (0 + 1) and SITC (2 + 4). There have been more exported the goods of SITC (0 + 1) groups. From 2007 to 2009 there was a decline in the volume of exports of that group. Since 2010, the export has the upward trend. If we look at commodity groups SITC 2 and SITC 4 we can see a similar

development. In the whole measuring period occurs to the growth in exports, with the exception of 2009, when the financial crisis was manifested. It affected the agricultural sector, too. In the measuring period was confirmed the growing trend of total exports of the Slovak Republic with the exception of 2009 year.

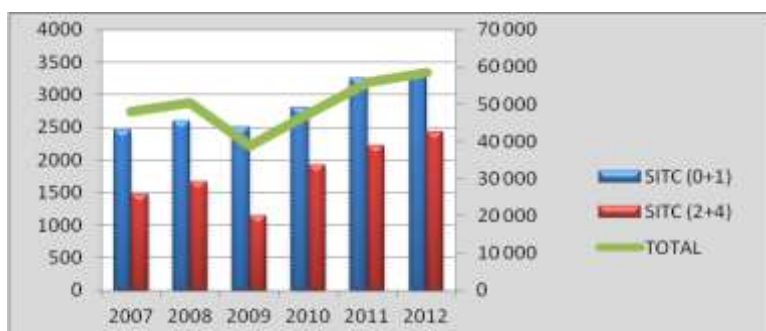
Figure 2 The development of export of the agricultural enterprises and total export (in million eur)



Source: Statistical Office of Slovak Republic. Own processing.

On figure 3 are shown the value of imports of goods of the groups SITC (0 + 1) and SITC (2 + 4). There have been more imported the goods of SITC (0 + 1) groups. From 2007 to 2012 there was a growth in the volume of imports of this group, with the exception of 2009, when there was a slight decline. We can confirm that the import had the upward trend in general. If we look at commodity groups SITC 2 and SITC 4 we can see a similar development. In the whole measuring period occurs to the growth in imports, with the exception of year 2009, when there was a large drop. In the measuring period was confirmed the growing trend of total imports of the Slovak Republic (with the exception of 2009), which copies the aforementioned commodity groups.

Figure 3 The development of import of the agricultural enterprises and total import (in million eur)



Source: Statistical Office of Slovak Republic. Own processing.

Table 3 and figure 4 show the results of the RCA index 1. The calculations indicated that all values of RCA 1 are < 0 this means that the country has a comparative disadvantage for the export of this commodity groups. In general, we can confirm the non-competitiveness of the agricultural sector of the Slovak Republic. The competitiveness of agriculture is influenced especially by factors associated with the innovation, financial resources, productivity, vertical coordination, marketing, and information techniques. In order to Slovakia could to successfully participate in the single market of the European

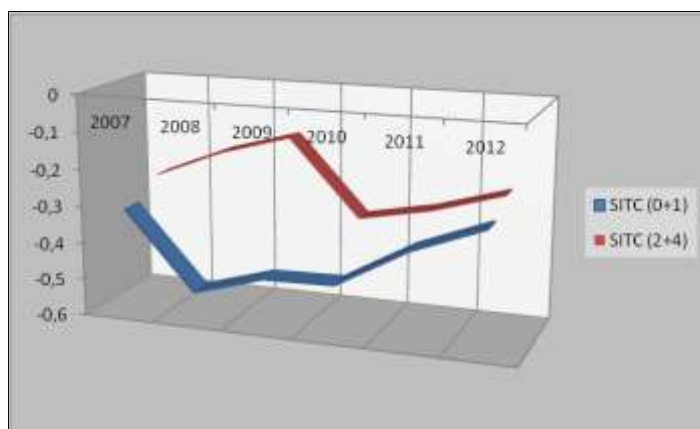
Union, it is necessary to enhance the efficiency and competitiveness of the agri-food sector especially by accelerating the restructuring of the agricultural sector and by use of these above-mentioned activities.

Table 3 The results of RCA 1 index for the period from 2007 to 2012

RCA 1	2007	2008	2009	2010	2011	2012
SITC (0+1)	-0,3133992	-0,5225991	-0,4654504	-0,4605779	-0,3511884	-0,2763971
SITC (2+4)	-0,2611819	-0,1839485	-0,1300477	-0,3343129	-0,2961379	-0,2386925

Source: Own calculations.

Figure 4 The results of RCA 1 index for the period from 2007 to 2012



Source: Own processing.

CONCLUSION

The agriculture and agribusiness globally are experiencing far-reaching changes. Agribusinesses need not only to compete in their domestic market, but also to compete in foreign markets and develop strategies to induce new customers in new markets to buy their products. The issues of competitiveness and comparative advantage have become very important for agribusiness managers and government, too. The competitiveness can be evaluated at the different levels of the economy: at the level of the product, the enterprise, the industry and the country's economy. In our study, we focused on the analysis of the competitiveness of the agricultural production of Slovak Republic. We used the numerical calculations using RCA 1 index (Index of revealed comparative advantages).

The index of revealed comparative advantages is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain group of goods or services. The calculations indicated that all values of $RCA\ 1 < 0$ this means that the country has a comparative disadvantage for the export of this commodity groups. In general, we can confirm the non-competitiveness of the agricultural sector of the Slovak Republic.

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Framework for the successful Creation of a strong Destination Brand

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Abstract

Destination branding has become a powerful tool to differentiate countries or places and obtain competitive advantages by improving image as tourism destination. The purpose of this paper is to offer a closer view at this field through overview of an emerging literature and to present various views about these issues and accompany it with possible linkage among them. Paper also points on the main and most crucial threats the destination can face. It also indicates key factors and various methods of destination branding in sake of creating positive image a prevent from emerging negative.

Key words destination, branding, identity, image, marketing, reputation

INTRODUCTION

The paper provides an overview of the theoretical background for the field of branding in relation to tourism industry. It will explain and describe the main issues presented by works in the field of destination branding, destination image and its in the development of this industry. The review of a literature covers couple main areas as follows: destination branding, destination image and role of those factors.

1. DESTINATION BRANDING

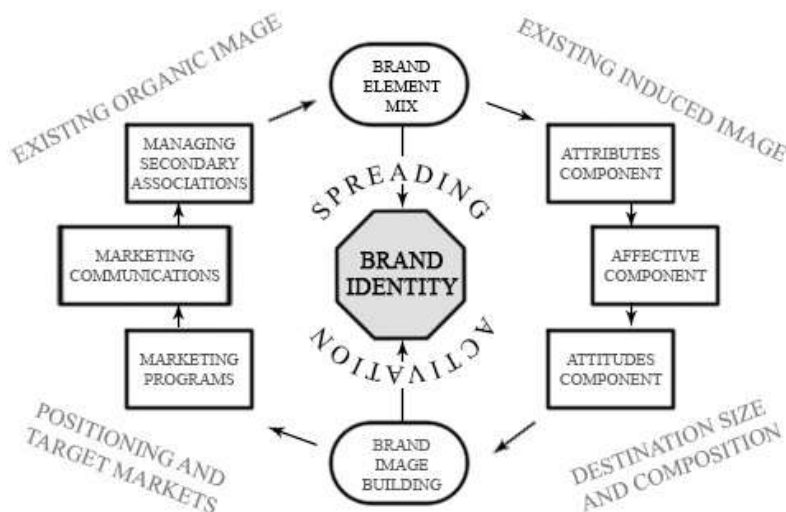
Branding of a destination is related with the promotion of the tourism of a country and helps to the enhancement of the overall image and to the creation of a powerful brand [2, 5]. It covers all of the perceptions that someone has about a destination based on experience, hearsay or prejudice. Those influence a mans attitude towards that place at an emotional level. It has to be trustworthy and real because it is not possible to manufacture it. [2]

The product of tourism is not a tangible good but an experience [4]. It is a highly competitive environment and tourist's awareness of different places is limited. It is necessary for a tourism destination to have a strong brand and an appealing image that differentiates it from the other places. [4] The decision process of vacation place selection is very complex and it is considered to be one of the greatest challenges the destination branding has to face [6]. The image of a destination is critical for the selection process. According to reference [7] and [8] a positive image is able to increase the international influence, restore credibility and enhance a destination's reputation. It's fundamental for a nation to have a good reputation that could increase its competitiveness and enhance the economic, political and social development [2, 3]

It takes a long time to change a reputation. Countries that do not care about developing a good reputation become the 'victims' of competitors and target markets that create stereotypes and negative sentiment. [9] There are several critical areas of reputation on which countries need to focus. Those areas are environmental credentials, technology and self-improvement. Self-improvement is related with destination branding: countries need to promote themselves and gain a reputation. [1, 2]

1.1 Model of destination branding

Reference [6] offers a conceptual model for branding of a destination focusing on building the identity of the destination by creating dynamic connections among the brand element mix which consists of an image building, brand associations and marketing activities.



tacit

Fig. 1. Forming of destination appeal and experiences [6].

Figure 1 synthesizes various approaches to destination branding. It links the concepts from a perspective of consumer to the perspective of destination marketer [10]. The process begins with the selection of brand elements in sake of forming strong brand associations that reflect the attributes as perceptual features characterizing the destination, affective components as personal values and meanings related to the benefits expected from the attributes and attitudes of the image which is understood as an

overall impression [6]. Through marketing and management tools, the brand identity is enhanced through spreading activation. To build a brand image one needs to 'identify the most relevant associations and strengthen their linkages to the brand. [6, 10] The four outer elements represent the contextual preconditions of the destination branding process.

Each destination has to conduct a systematic tourist analysis to identify new trends and understand motivations for visiting the country. Following step is the analysis of the competitors, their advantages and disadvantages, possibilities to improve competitiveness and find new niche markets. The last step should be an analysis of the destination's actual position in the market. [6, 7] All models take into account both the tourists and the country's marketer perspective. Branding process should include positioning and definition of target markets, destination's size and composition and study of the perceived image.

1.2 Challenges

The main challenge is to differentiate the destination from others and to increase the awareness and recognition amongst potential tourists. It has to create a positive image for the destination and to create a strong brand and brand identity for the destination [2]. Tourism is often the most promoted sector therefore another significant challenge is probably reaching balance in the representations of a destination [11]. Next one tends to be an objectivity. Smaller countries' should try to present a real image of a country and not to highlight limited achievements or historical facts important to nationals but which aren't interesting for the world population. [1]

2. DESTINATION IMAGE AND IDENTITY

The most valuable assets a country can possess are a positive image and a positive reputation. Every destination has an image, but are not directly under the control of marketers [12]. Destination image can be defined as a sum of an individual's mental representation of knowledge, feelings, and global impression about an object or a destination [13]. Reference [10] propose an idea that destination image is multidimensional, with cognitive and affective elements. it is a mix of information, feelings, beliefs, opinions, ideas, expectations and perceptions about a certain place.

An image of a brand plays a key role in destination branding. Nevertheless, reference [6] emphasizes that the process of image formation is just a part of whole process. Brand identity is created by the destination marketer and supported by the touristic attraction, history, and people. On the other hand, the brand image is a perception of the receiver and depends on the previous experiences and on the marketer's communication skills [14]. The brand image is a reflection of the brand identity and plays an essential role in the construction of the identity. [14] It reflects how all the brand's elements contribute to the awareness and image. It is a main aspect of the brand's strategic vision because it gives purpose and meaning to the brand [15]. The elements of a strong brand complete each other and they unify the entire process of image building. In return it contributes to the strength and uniqueness of the brand identity [6].

2.1 Destination image and its role

Reference [1] says that the tourist goes to a destination to see the image rather than the reality. Images of destinations are often determined more by an area's image projection than its tangible aspects. Destination image helps to form a destination's brand and allow it to succeed. Branding process consists of two types of image. The first is projected which is promoted by the marketers and the second one is perceived image which is received by the tourists [16]. The image formation is end result of what stays in tourists minds as a result of sum of all information they know about the place.

2.2 Dealing with negative reputation

In our security-obsessed age is crucial knowing how to deal with a negative national reputation. The problem is that stories about war, terrorism, poverty, disease, corruption, crime and violence – whether entirely justified or not – tend to spread very rapidly, to be instantly believed, and to last for a very long time. If we want people to change from the story they currently believe about a country, we have to give credit to their attachment to that story. [1,10] Unfortunately, negative or shocking stories are very often more interesting than good or positive ones. [1] Proper benchmarking, accountability, transparency and clear goals for marketing are equally essential.

Reputation cannot be built by the destination, it can only be acquired. “*The way to gain a good reputation is to endeavor to be what you desire to appear*”, Socrates. The fundamental problem for destination branding is difference between the message and the context in which this message is perceived [17]. Messages are processed out of reach of marketing competences. It's processed in the minds of people [9, 17]. Message misunderstanding is closely followed by lack of patience so results can appear and insufficient creativity which results in destination branding inefficiency [9, 17]. Intense global competition in the tourism industry forces destinations to develop strong, unique and competitive destination brands [18]. However destinations are not a single product but a composite product consisting of a mix of different components [18].

Dealing with negative reputation is a matter of playing between tacitly acknowledging the problems and appearing to ignore or even lie about them. Marketing communications is not the right medium for addressing issues such as security, foreign policy or human rights, and neither is the tourist board. This is simply another example of how important it is for all sectors to work together when national image is at stake. [1] However, the multidimensionality and the abstract notion of a destination, as a whole, impose complex challenges in the development of an applicable framework for nation branding. Additionally, branding a nation requires the coordination of numerous stakeholders who are almost impossible to be managed and controlled in a free-floating environment. This imposes several restrictions while trying to build a powerful nation brand. [19]

CONCLUSION

The paper presented the knowledge in the field of destination branding and destination image. Place branding may be characterized as a domain that is currently very much practitioner-led and where academic research has been slow to follow, although high levels of academic interest in the topic are now beginning to materialize. There exists the close emotional ties between people and the places they live, visit and work. This brings an added dimension to consider when it comes to introducing practices such as place branding and marketing to a community. Destinations must constantly adjust to changing circumstances while maintaining a balance with the values and vision of their residents.

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The possibility of influence of social and emotional intelligence on manager's work

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Abstract

In this article we describe the basic ideas regarding the work of a manager, the possibility of influence that affect his work and, consequently, we focus on specific definition and identification of terms of social and emotional intelligence. We specify the essential information obtained from sources available and data provided. We draw our attention to theoretical bases of the personality of a manager within the surveyed intelligence types, we focus on their influence on manager's work, we analyze the particular types of intelligence and, last but not least, we analyze and precisely define the basic terms regarding social and emotional intelligence.

Key words: Social intelligence, emotional intelligence, management, manager

1. SOCIAL AND EMOTIONAL INTELLIGENCE

Each system, each organisation, each company is as successful as the quality of its key parts. Very often we can hear the opinions that the company's success depends on people who established the company and their abilities. Those people are likely to possess unique qualities. Supposing that the success of company depends on quality and successfulness of people who are in charge, then it is easy to employ just the right people who possess the courage and ability and, consequently, they will ensure the company's success. But there is a lack of such people. The various and challenging activities and roles put heavy demands on the personality of managers. Each employee is different and acquainted

with knowledge and practical abilities that are demonstrated in various ways. However, we still expect all employees to use their knowledge and abilities efficiently to fulfill the company's aims. Nowadays, the term of social competence is used and discussed quite often. It can be found in the field of pedagogy, psychology, social work but in management and other man focused sciences as well. The majority of authors distinguish conception, social and professional competences. Their occurrence, however, may not be the equal on particular levels of management (Smékal, 2007). Generally, the term of social competence can be defined as the following: 'Social competences express particular ability or qualification in the field of interpersonal communication.' (Jarošová a kol., 2005).

Social competence includes attention to performance of the others, the ability to understand other people's feelings and problems and selfreflection, flexibility towards others, but also the ability of using interpersonal abilities (Nakonečný, 1998). If we were to find full-area definition of social competence, we would use Smékal's definition (Smékal, 2007), who describes this competence as the 'proficiency, qualification, man's mastery to deal with people efficiently and solve problems of incorporation oneself into a group and activity within this group in compliance with company's aims and following the moral principles. Everybody who lives and cooperates with people must possess the social competence. Social competences is the structure of habits, needs, attitudes and etc. Its core is selfreflection which is the essential for the proper behaviour towards people that the manager comes into contact with. Social competences can be considered as one of the most important abilities of a successful manager which are often omitted and undeveloped. In contemporary dynamic society with fast development and changeable environment, it is very important to develop social competences of managers in order to cope with demands of modern world (Smékal, 2007).

Nakonečný (Nakonečný, 1998) deals with the relation between social competence and social intelligence and states that social competence is the key concept of social psychology and that is the concept of abilities or intelligence in the psychology of personality. He expresses the existence of particular social phenomenon which was also identified as social intelligence. It is not identical with the term of general intelligence but it is special case of intelligence used in social interactions. Some types of intelligence have a lot in common. Gardner (1999) approaches the term of intelligence in similar way and his idea of multiple intelligence is contextual, the context including an individual and a society. He states seven relatively autonomous fields of cognitive activity of an individual and consequently the human competent behaviour arises by their coordination. These fields he conceived as potentials or competences and they are: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, intrapersonal and interpersonal, social. There is another definition of the term of intelligence according to information and knowledge which the individual possesses. In the year 1918, Thorndike distinguished abstract, practical and social intelligence. Social intelligence was understood as the ability of individual to understand people and able to deal with them (Smékal, 2007). One of the aspects of behaviour of an intelligent person, in the Sternberg's studies (Sternberg, 2009) emphasized by the majority of his respondents, was the factor labelled by the authors as 'social competence'. Orme and Bar-On (2002) state that there is a close relation between the social and emotional intelligence. They both describe two aspects of the same construct and most of definitions of social and emotional intelligence includes one or more of the following abilities: understand and constructively show emotions, understand the feelings of other people and create the cooperative interpersonal relationships, efficiently manage and regulate the emotions, cope with the new situations and solve the

problems of personal and interpersonal fundamentals, be optimistic, positive and motivated to define and achieve the aims. Emotional intelligence (labelled as EI) was first defined by Goleman (1997) as the part of social intelligence that involves the ability to follow own and strange emotions, make difference between them and use these information in thinking and behaviour. He pointed to the fact that not only is cognitive intelligence important for life but emotional intelligence as well. Within the emotional intelligence he emphasized the learning and controlling own emotions, selfmotivation, empathy towards the others and social smartness. The author stressed also the way how the emotional intelligence influences the success of man at work. Birknerova, Kentoš (2011) state that it is about the ability to identify emotions, understand emotions, control own emotions and the emotions of the others and using the emotions to support adapting behavior.

Research respondents includes executives and managers in production companies as well as executives and managers of administration and pedagogical (scientific) areas in Bratislava and Prešov region, those working in private and public organizations. The questionnaire was answered by 111 respondents employed in the companies of the region, 65 women and 46 men. The research was carried out within the year 2013. The other demograhic figures surveyed were gender identity of respondents, place of their permanent residence, education accomplished, working field, official position within the organization, type of organization and region of Slovakia where is the permanent residence of the respondents. The aim of the research was to find out the gender differences in the area of social and emotional intelligence and also statistically significant differences between executives and managers. On the basis of defined aim, we stated the following research hypothesis:

H1: We assume the existence of gender differences in social and emotional intelligence.

H2: We assume that there will be statistically significant differences in social and emotional intelligence between executives and managers.

Results depicted in Graph 1 present the structure of respondents where the portion of managers is 69 and the portion of executives is 42 from the total number of 111 respondents asked, for the benefit of managers.

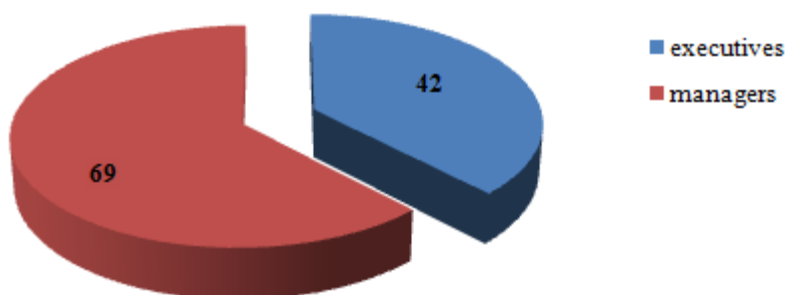


Fig.1: Division of respondents according to their working positions

Source: own processing

With the help of t-tests we were to determine the statistical significance between respondents, it is for managers and executives within the social and emotional intelligence. The results are shown in Table 1.

	Working position	Mean (priemer)	Std. Deviation (Smerodajná odchýlka)	t (Testové kritérium)	Sig (2-tailed) (Signifikácia)
Empathy	managers	2,2778	0,51423	-0,344	0,732
	executives	2,3125	0,49669		
Manipulation	managers	1,6977	0,57642	1,891	0,061
	executives	1,4966	0,48393		
Losing control of own emotions	managers	2,4030	0,67828	-1,450	0,150
	executives	2,5714	0,52796		
Flatteries	managers	2,8768	0,60273	2,817	0,006
	executives	2,5238	0,69801		
Lies	managers	2,4457	0,61666	0,570	0,570
	executives	2,3690	0,78910		
Amorality	managers	3,2126	0,57727	-0,154	0,878
	executives	3,2302	0,59121		
Cynicism	managers	2,9167	0,46902	-0,718	0,475
	executives	2,9881	0,56835		
Emotional stability	managers	2,3786	0,43472	2,139	0,035
	executives	2,1786	0,54198		
Self-confidence	managers	2,4511	0,54727	2,779	0,006
	executives	2,1667	0,48010		
Sociabilty/ Companionability	managers	2,8087	0,49559	-0,329	0,742
	executives	2,8413	0,52078		

Tab. 1: Štatistická významnosť v oblasti zaradenia v organizácii

Source: own processing

In Table 1 we can see that statistically greater significance is demonstrated for the benefit of managers in two dimensions of surveyed social competences. Those dimensions are in the area of Emotional

intelligence. In the area of Social intelligence (Empathy, Manipulation, Losing control of own emotions) we did not notice any statistical significance. Therefore these findings demonstrate that the managers are more emotionally stable, self-confident and use more flatteries as the means of manipulation while working in order to achieve personal aims than executives.

Managers dominate in the area of Emotional intelligence as well. Within two dimensions we did not see the statistical significance only in the dimension of Sociability/Companionability. We confirmed the statistical significance for the benefits of managers in dimensions of Emotional stability and Self-confidence. Within Emotional stability the managers do not spend much time thinking about their problems at work. If their working results are not satisfactory, they easily get over and take it easier than the others in working team. The previous failures are not the burdens for them and they are not put off easily. Moreover, they are rarely afraid of their work. Regarding the dimension of Self-confidence we also demonstrate statistical significance for the benefit of managers compared to executives. The typical features of this dimension is that managers are able to react promptly, support their opinions openly though it can influence the working atmosphere in negative way. Furthermore, they possess such qualities that make them outstanding in comparison to the others. They feel good in serious situations like important conversations or presentations. The managers are then level-headed and are able to deal with the tension at work. Not only do they accept responsibility for the task achievement but also they influence the working atmosphere, interpersonal relations and their creation within working process. That's why it is very important for them to be emotionally stable and self-confident.

In Graph 2 we can see the respondents divided according to the working area with the administration portion of 58, education/research 31 and production 22 respondents out of the total number 111 respondents.

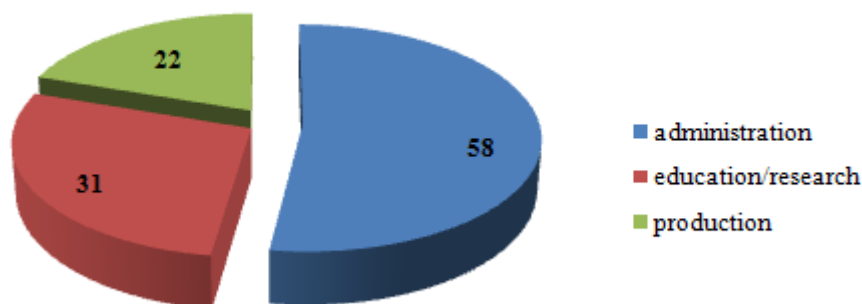


Fig.2: Division of respondents according to working area
Source: own processing

Using Post-hoc comparison we were to observe the differences between particular working areas and subscales of Social intelligence (EMESI) as well as the aspects and factors of Emotional (BIP) intelligence. We identified statistically significant differences between working areas and SQ (EMESI)

aspects: Empathy and the Losing control of own emotions factor. On the basis of dispersion $F= 4,909$, $Sig.=0,009$ analysis we observed the significant differences in SQ aspect empathy in relation to working areas.

Work area	Work area	Mean Difference	Sig.
administration	education/research	0,02874	0,964
education/research	production	0,34483	0,037
production	administration	-0,37356	0,008

Tab. 2: Post-hoc comparisons of average assessment in aspect SQ empathy according to working areas (Tukey HSD)

Source: own processing

Table 2 shows, that the aspect of social intelligence “Empathy” with significant differences between “educational system – research” and “production” as well as “production” and “administration” is always to the detriment of working area “production”. Managers in production companies seem to have less empathy than managers in education/research or administration. The employees in administration have the greatest empathy. Such employees are able to recognize the emotions, intentions and weaknesses in working team.

On the basis of dispersion $F= 6,156$, $Sig.=0,003$ analysis we noticed the significant differences in SQ aspect manipulation in relation to working areas.

Work area	Work area	Mean Difference	Sig.
administration	education/research	-0,30876	0,026
education/research	production	0,49057	0,003
production	administration	-0,18182	0,354

Tab. 3: Post –hoc comparisons of average assessment in aspect SQ manipulation according to working areas (Tukey HSD)

Source: own processing

There has been statistical significance between administration and education/research and also between education/research and production in the SQ aspect of Manipulation dimension, always having education/research at a disadvantage. In this SQ aspect the manipulative behaviour occurs mostly in working area of education/research. On contrary, managers as well as other employees in production use the manipulative behaviour the least. In the area of Social intelligence is this result important because we observe that employees in working area of education/research are capable to persuade the working team easily to support them, to take the advantage of various situations and abuse the lies for their own benefits.

On the basis of dispersion $F=4,113$, $\text{Sig.}=0,019$ analysis we saw the significant differences in SQ aspect losing control of own emotions in relation to working areas.

Work area	Work area	Mean Difference	Sig.
administration	education/research	0,39105	0,014
education/research	production	-0,22685	0,380
production	administration	-0,16419	0,535

Tab. 4: Post-hoc comparisons of average assessment in aspect SQ losing control of own emotions according to working areas (Tukey HSD)

Source: own processing

Table 4 demonstrates the statistically significant differences between administration and education/research. More statistically significant differences while assessing the aspect of Losing control of own emotions we did not noticed. According to the materials the analysis shows the disadvantage of administrative workers. The contact with others in working process make the employees in administration nervous, the feelings of co-workers make them upset and they feel uncomfortable with new employees. It can be said that the employees in administration control their emotions the least, on the contrary the employees in education/research are flexible, contact with co-workers do not make them nervous, they are open and do not get easily upset. Managers as well as other employees in this area can control their emotions best.

On the basis of dispersion $F=4,964$ $\text{Sig.}=0,003$ analysis we saw the significant differences in MACH IV aspect lies in relation to working areas.

Work area	Work area	Mean Difference	Sig.
administration	education/research	-0,46343	0,006
education/research	production	0,29729	0,245
production	administration	0,16614	0,576

Tab. 5: Post-hoc comparisons of average assessment in aspect MQ lies according to working areas (Tukey HSD)

Source: own processing

In Table 5 we can see the statistical significance between administration and education/research. In working field “administration” the highest score belongs to working area “educational system – research”. As far as we assumed statistically significant differences in Social and Emotional intelligence in working area, the hypothesis was right.

Conclusion

The term competence involves new demands on human being, it is the synthesis of knowledge, attitudes and experience that flows from the state of modern society. Competence is used everywhere where we

deal with the ability to think, perform or learn. On the whole, the working environment, mutual interactions and their quality creates the important fundamentals for development of competences. Finally, we can claim that knowledge is not sufficient enough for being successful. It requires the mental and personal abilities that are necessary for achieving the performance required. Within the term of social competence we describe it as one of the most important abilities of a successful manager. This competence is very often neglected. In contemporary society with fast development and changeable environment, it is essential not to forget and develop social competences of managers so they are able to deal with the demanding situations and tasks of modern world.

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The role of managers and users in the information systems development

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Abstract

Managing information system is a critical skill for success in today's business environment. All levels of managers and users are involved in process of decision making and managing information system in their firms and organizations. The main two questions we are dealing with are why and how to develop information competencies of our graduates - future managers and advanced users of information systems. We try to integrate many aspects of the ICT use into the education. The goal of our new manner of education is to assist future managers in becoming knowledgeable participants in information systems development.

Key words: Information system, manager, user requirements, education

1. INTRODUCTION

The changes of the economic environment started by scientific and technical progress in the first half of 20th century and followed by the continuous speed development, massive spread and the extent of computers use as well as the extensive conglomerate of technical means and technologies, especially information and communication technologies (ICT). ICT and information systems (IS) participate in making huge amount of information available, which is very important in getting new knowledge. They enable effective and targeted analysis of enormous databases. They support and enable quick, cheap and quality communication between people, institutions; they help decentralize research and manufacturing activities. [8]

ICT, IS, and computer networks penetrated into all aspects of human life where they enable us to work by absolutely new ways and create new values. Computer and the Internet have brought to people, companies, and organizations unprecedented opportunities of mutual connection and partnerships building. Economists, politicians, publicists still more often talk about a new economy as of a new system of organization of financial, enterprising and business activities based on intense work with information and knowledge. Knowledge economy is a hierarchy of networks, in which opportunity and ability is becoming a part of knowledge intense relations determines socio-economic position individuals and companies.

In the environment of knowledge economy the customers and users play an important and active role in manufacturing process, in which information has become a part of it, knowledge and thoughts serve for specification of manufactured product or provided service. Products are distributed in so called

„personalized shape“, which means it is adjusted to individual requirement of a customer. The gap between manufacturer and customer is getting smaller.

As Figure 1 shows, for stimulation of knowledge economy growth are very important economics basis, such as efficient education politics, economic competition, open markets, direct foreign investments etc. The development of knowledge economy depends on four main pillars: innovation, new technologies / at first ICT and IS, human capital and company's dynamics. Globalization is a factor, which affect all four of these pillars. Nowadays it is strengthened by expert's mobility, ICT, quick and cheap transport, liberalization and market globalization and capital markets. For deepening of the benefits of knowledge economy it is vital to develop social capital of organizations, new practices of knowledge management and organizational innovations. Investments into ICT, research and development are without knowledge management and appropriate organizational structures less profitable. The mentioned structures present team cooperation, flat managing structures and stronger delegation of competences and responsibilities onto employees. [8]

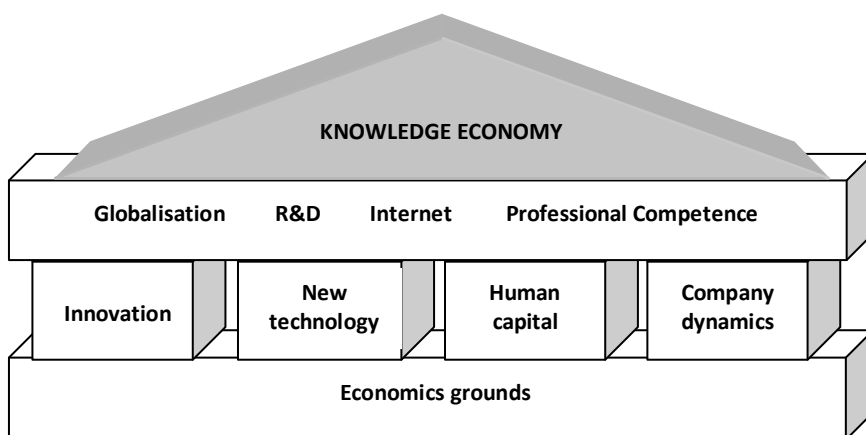


Figure 1. Knowledge economy pillars [8]

2. WHY DO MANAGERS NEED TO UNDERSTAND AND PARTICIPATE IN THE INFORMATION SYSTEMS DECISIONS?

It is common to think of technologies, especially of the ICT and IS, in terms such as machines, computers, or highly advanced electronic gadgets. However, technologies embrace a lot more than just machines. Any technology consists of four interdependent, co-determining and equally important components:

- Hardware: the physical structure and logical layout of the equipment or machinery that is to be used to carry out required tasks.
- Software: the knowledge how to use hardware in order to carry out required tasks.
- Brainware: the reasons for using the technology in a particular way. This may also be referred to as know – why.
- Know – how: the learned or acquired knowledge of or technical skill regarding how to do things well. Know – how may be a result of experience, transfer of knowledge, or hands-on

practice. People acquire technical know-how by receiving formal or informal education or training or by working closely with expert in a certain field. [2]

Technology has become entwined with all the classic functions of business – operations, marketing, accounting, finance – to such an extent that understanding its role is necessary for making intelligent and effective decisions about any of them. Therefore, understanding basic fundamentals about using and managing information is worth the investment of time. Furthermore, a general understanding of key IS concepts is now possible without the extensive technological knowledge required just a few years ago. [10]

As we can read in [9], new information system is built as a solution to some type of problem or a set of problem the organization perceives it is facing. The problem may be one where managers and employees realize that the organization is not performing as well as expected, or it may come from the realization that the organization should take advantage of new opportunities to perform more successfully. The activities that go into producing an information system solution to an organizational problem or opportunity are called systems development. Systems development is a structured kind of problem solving with distinct activities. These activities consist of systems analysis, systems design, programming, testing, conversion, and production and maintenance.

Figure 2 illustrates the systems development process. The system development activities depicted here usually take place in sequential order. But some of the activities may need to be repeated or some may take place simultaneously, depending on the approach to system building that is being employed. Each activity involves interaction with the organization. Members of the organization participate in these activities and the systems development process creates organizational changes. Each of the core systems development activities entails interaction with the organization.

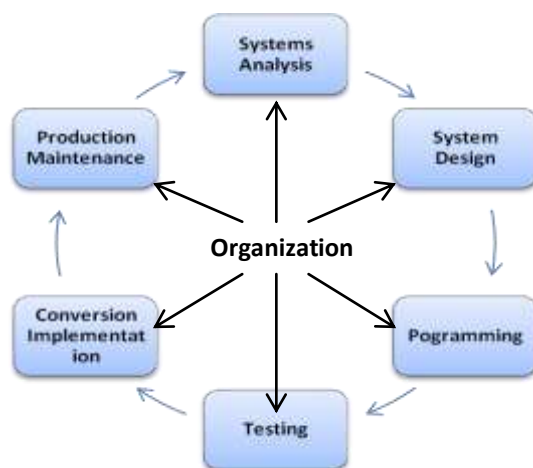


Figure 2. The systems development process [9]

An improvement of IS and enterprise processes is currently necessary for a company to stay on a market. During the last 20 years it has become obvious for companies to improve there is and business processes - they are made to do so by the customers who demand better quality products and services. If a customer doesn't get what he wants, he can choose from a lot of competitive companies. This creates a pressure of competitive environment - the primary value of market economy. [11]

Today, 60% of managers believe that the current ICT opportunities limit their development and are not able to fulfill their requirements to business changes in the required time, cost and quality. On the other hand, 60% of IT workers believe that business managers do not know what they want; they do not know what they can demand from ICT and are not able to define their requirements clearly. [1]

Based on a sharp development in ICT area and globalization of market the companies are made to make a continuous improving of the management systems using the newest ICT. The evolution of new products is happening daily, each day in shorten life cycle. [12]

As Hammer and Champy show in [7]: The companies are pushed by three separately and together influencing forces deeper and deeper on the ground that is for their managers and leading employees something frightening and unknown. We call these forces the three "C": customers, competition and change. They are not new of course, but their characteristics are significantly different from their past forms.

ICT is a critical resource for today's businesses. If a majority of a firm's business is online, as it is for all banks, airlines, most manufacturers and retailers, and many insurance firms, the company's business strategy suddenly becomes totally irrelevant when the network and ICT is down. Technology both supports and consumes a significant amount of firm's and organization's resources. The trends show that high-growth firms are increasing their investment in ICT. These resources must return value, or they will be invested elsewhere. The business manager, not the ICT specialist, decides which activities receive funding and develops metrics for evaluating the performance of the investment. Therefore, the business manager needs a basic grounding in managing and using information and information systems. A manager must know how to mesh technology and people to create effective work. Technology facilitates the work that people do. Correctly incorporating IT into the design of a business enables people to focus their time and resources on issues that bear directly on customer satisfaction and other profit-generating activities. But adding IT to an existing organization requires the ability to manage change. The skilled business manager must balance the benefits of using new technology with the cost associated with changing existing behaviors of people in the workplace. [10]

3. THE ROLE OF MANAGERS AND END USERS IN ESTABLISHING INFORMATION SYSTEM REQUIREMENTS

„Your ability to gain, process and use information decides whether you will belong to winners or losers“ wrote Bill Gates in 1999. [5] Since then, the meaning of his words has been constantly increasing.

Managers are no longer able to afford the luxury of abdicating participation in information systems decisions. Managers who choose to do so risk having their business compromised. With the proliferation of Internet, ICT, web and e-business information systems are the heart of virtually every business interaction, process and decision. Managers who let someone else make decisions about their information systems are letting someone else make decisions about foundation of their business. The explosive growth of ICT, especially personal computers and Internet has highlighted this fact, since together they form the backbone for virtually all new business models. A manager who doesn't understand the basics of managing and using information cannot be successful in the business environment. [10]

User information requirements drive the entire systems-building effort. Users must have sufficient control over the design process to ensure that the system reflect their business priorities and information needs. Working on design increases users' understanding and acceptance of the system, reducing problem caused by power transfers, intergroup conflict, and unfamiliarity with new system function and

procedures. Insufficient user involvement in the design is a major cause of system failure. Faulty requirements analysis is a leading cause of systems failure and high systems development costs. A system designed around the wrong set of requirements will either have to be discarded because of poor performance or will need to undergo major modifications. Requirements analysis is very important part in IS development. It carefully defines the objectives of the new or modified system and develops a detailed description of the function that the new system must perform. Perhaps the most challenging task of the systems analyst is to define the specific information requirements that must be met by the system solution selected. At the most basic level, the information requirements of a new system involve identifying who needs what information, where, when, and how. [9]

As [10] said, decisions about IS have direct impact on the profits of a business. Adopting the wrong technologies can cause a company miss business opportunities. Inadequate IS can cause a breakdown in servicing customers, which directly impact sales. Inefficient business processes sustained by ill-fitting IS increase expenses. Failure to consider IT strategy when planning business strategy and organizational strategy leads to one of three business consequences:

- IS that fail to support business goals;
- IS that fail to support organizational systems;
- Misalignment between business and organizational strategies.

IS are often a major investment for any firm in today's business environment. If the IS do not allow the company/organization to realize its goals, or if the IS lack the capacity needed to collect, store, and transfer critical information for the business, the results can be disastrous. Customer will be dissatisfied or, worse, lost. Production costs may be excessive. And, worst of all, management may not be able to pursue desired business directions that are blocked by inappropriate IS.

4. ABILITY OF STUDENTS TO WORK IN THE FIELD OF IS

Using the questionnaire administrated in the first semester on the first seminars of subject Informatics I at Faculty of Economics, Technical university of Košice we searched for real state of students' ability to understand basic concepts and work in the field of IS. The main question asked in the particular part of the questionnaire was: "Have you met the following terms on the informatics/computer science lessons?"

- Information system - definition, importance, usage, ...;
- Types of IS - management IS, executive IS, ...;
- Life cycle of IS;
- Modeling - mainly in the field of IS development;

We evaluated 644 students' answers. As we can see in the Figure 3 students' answers evaluation has shown that in average less than 20 % of the students have had experience with IS and less than 1% specified dealing/working with modeling as a method of simplifying and recognition of real objects. Less than 10 % of students recognize the types of IS and less than 1 % recognize other terms.

To improve this situation we included a chapter called Information Systems in the subject Informatics II in second semester. We started from the basic theoretical concepts in the field of IS, their modeling in general, business processes modeling using ARIS and UML. By solving practical problems, students become familiar with available features helping them work with a lot of available information. For teaching in this area we created two studying texts:

- Information systems for economists, which was divided to the following chapters: Development in the information area, Basics terms and their meaning, Information systems, Specification of user requirements, Modeling using the UML.

- Basics of business process modeling with content: Information and knowledge society, Business processes, Business process modeling methodology, Business process modeling standards, Business process modeling tools.

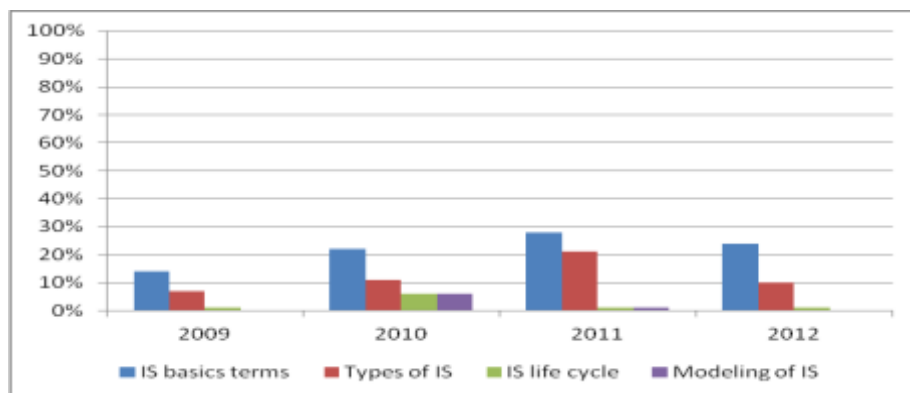


Figure 3. Percentage comparison of students answers in the field of IS

We intended to provide our students with a foundation of basic concepts relevant to managing all phases of information system life cycle, especially initial - formulation of user requirements and system analysis.

5. CONCLUSION

The information aspects of the management have very important function in increasing competitiveness and management quality of economic systems. [6] The efficiency of investments into technologies depends strongly on users, their motivation, interest and education. The goal of proper education is to provide the foundation for making the general business manager a knowledgeable participant in IS decisions, since any IS decision in which the manager does not participate can greatly affect the firm/organization's ability to succeed in the future. Effective participation requires a particular set of managerial skills.

We assume that the importance of the proposed education in this area will grow, because few years ago the "information" work has participated on GDP in developed countries with more than 50-60 %. [3] It is expected that in year 2020 the ratio of manual workers will only be of 10 -12.5 % of the whole. [4]

Higher education institutions should be encouraged to improve the quality and relevance of the courses they offer. It is very important to prepare students for challenges of knowledge economy. It is necessary for all graduates to understand functions, possibilities, advantages and disadvantages of the IS and ICT.

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MEASUREMENT AND EVALUATION OF RANDOM OPERATING PROCESS BY HANDLING OF AIRCRAFTS, PASSENGERS AND LUGGAGE

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Abstract

By implementing of statistical methods to the process of evaluation of measured variables determining the behavior of complex systems, we receive information that reveal hidden relationships between variables or states of the system. These qualitative data are very important for the analysis of investigated system. This article deals with handling process at the airport, with a focus on ensuring the efficient and early handling of aircraft, passengers and luggage, as well as the need for measurement and evaluation of these processes.

Key words

simulation, modelling, random process, system

1. Introduction

Random processes are more complex than deterministic processes, so it is natural to work with them, as well as with corresponding experimental devices for registration and evaluation which is also complicated. Their own conditions in which random operating process senses have major impact to the quality of evaluation results. So it is necessary to give them much more attention than to deterministic process. Selecting of measuring chains depends on specific conditions and mainly on technical equipment of the measuring apparatus. We usually performs the operating measurments in order to assess operating stress (or estimating lifetime) or dynamic properties of construction, capacity utilization and utility subsystems and others.

2. Modeling and simulation

Modeling and simulation are very wide terms and people from different disciplines projects in them different facts. Those terms represents in the field of economics e.g. prediction of price trends, modeling of growth of economic indicators and so. We often meet with the design of equipment and buildings in aerospace industry, which properties must be examined earlier than these facilities or buildings will be created.

Whether the draft meets the stated requirements of object (such as heat resistance of object, durability of the building against the earthquakes) is examined by using CAD models and simulations. From previously mentioned facts is clear that terms of modeling and simulation in different disciplines (as well as inside same science discipline for different fields) represent another entity that have some characteristics in common.

2.1 Routing of modeling and simulation

Technique of modeling and simulation depends on progress in such disciplines in which models are formulated. It contribute by its results to continuous development as a independent scientific and engineer discipline. Next progress depends on results from design and development of new technical equipments, which will be available for simulation in the future. Modeling and simulation are important part of technicians word and engineers which performs work in variety of industries. To fulfill the challenges in this area is crucial to have programs and tools which facilitate the creating of complex models at which they spend a lot of time. Advances in science are getting faster and we meet them at every step. Development shows that there is nothing unknowable in our world and that every problem will be solved sooner or later. Scientific knowledge is applied in human's life much more effective and science becomes a fair production force.

2.2 Simulation in management

In the application of simulation methods are often present two kinds of simulations:

- **Factor simulation** - is based on changes of exogenous variables and it examines their impact at endogenous variables,
- **Target analysis** – examines the impact of endogenous variables to exogenous variables and allows pointing to meet the needs of target variable.

Simulation in management are important for the forecast of variable development. Simulation is about creating of combinations that could occur under certain assumptions in the future. One of the most important question is that – which endogenous variables can be subject of simulation. There are certain future states in development of goods that have constant development and can not be greatly changed. For example strategic raw materials, domestic and foreign investment, job offer, space distribution and so. The object of simulation can be variables that can be affected by managers. It is necessary to note that simulation allows finding solutions even under unfavorable conditions and alerts managers to the need of changes. Procedure of simulation of management process is based on knowledge of behavior of real economic phenomena. The development of investigated phenomena can be illustrated by simulation model.

3. Operating processes and their measurement

Successful creation and establishment of any system predict that its creator – designer knows the operating conditions under which can system exploit. Knowledge of operating conditions involving the external environment, internal operation of a system and service activity is important for design and evaluation of functional properties, operator comfort, dynamic and stable criteria, reliability and other specific features that are directly or indirectly conditioned or affected by operational loads, physical conditions and so. Operating conditions are thus factors of operational processes entering into all the theoretical and experimental procedures, estimation and evaluation operating characteristics of systems (objects). Their knowledge and definition have to precede before determination of operating processes and use of objects.

3.1 Selection of measurement conditions and measured places

Selection of measurement conditions must always align with the goal of measurement. It is always basically related to one of the two tasks: gain operational characteristics of object (system) activity under specified conditions and with certain operating modes. The aim of such measurements can be reveal the causes of failure of any component in a specific work activity, assessment of stability under extreme conditions and so, determination of the characteristics of system operation or its parts in the summary of typical operating conditions in order to obtain data for the assessment of dynamic properties and calculation of reliability under typical operating loads. While the first task can be characterized as an analytical approach to solving of reliability the second task has integral characteristics. It is not possible to favor either one in practice and selection of measurement

3.2 Random process

Random process is random function of time. The value of a random function is random variable for each value of independent variable, so random function is represented by an infinite set of random variables that depends on independent variable (with random processes at time). The individual items of the set can be determined experimentally – it is called realizations of random process. Random process, as term from mathematical point of view is understood as set of all possible realizations with common statistical characteristics. From the physical point of view is random process a phenomenon that progress random in time. Even if we know progress of few realizations, we can not determine progress of next implementation. Knowledge of progress of realization in past also does not determine the progress of that realization on the future.

3.3 Random phenomenon

A phenomenon that as a result of random experiment may or may not occur (eg throwing dice). We can not exactly determine whether a random phenomenon occurs, but we can calculate probability of its occurrence. We know:

- **Compatible random phenomena** – we can not exclude their occurrence (eg we can not exclude that in the act of playing two dice at the same time not fall the same numbers).
- **Incompatible random phenomena** – if any two events can be excluded (eg if roll one dice than can not fall the same values at the same time).

4. Operations of aircraft passengers and luggage at

There are some phases of air transport process: airline ticket purchase, transport to airport, preparing of passengers to flight, technical clearance of aircraft, security check (passengers, luggage), waiting before

departure, boarding of passengers, on-board service, flight transport, disembark passengers to terminal, leaving the airport. Handling process – is defined as providing of handling services by airline (handling).

- **commercial:** handling of passengers, handling of luggage, handling of cargo.

- **technical:** aircraft guidance to stand, aircraft refuelling, connecting to ground power source (GPU), docking of boarding stairs, de-icing of aircraft and other.

4.1 Economic aspects to determining the performance of the airport

Productivity and performance of airports are similar to the airlines, analyzed in detail and compared in order to find the way to increase their productivity and reduce costs. Airports mainly uses performance and economic indicators.

The **performance indicators** include:

- number of aircraft movements (movement of aircraft means an aircraft take-off or landing). This indicator is important for evaluation and planning of airport capacity, runway systems, taxiway systems and aprons. It is important to monitor of its value during rush hours that are important to determining the required capacity of airport.
- number of maximum takeoff weight MTOW. In practice there are MTOW for the type of aircraft or to particular aircraft and it has impact to the landing fees.
- number of passengers. It monitors the number of departures, arrivals, transfers, transits and total number of passengers.
- numbers of handled cargo tons. It monitors the number of cargo clearance at cargo terminals.

The **economic indicators** include:

- **quality indicators**, by which it is possible to determine degree of customer satisfaction. One of them is timeliness or punctuality. For that reason are monitored any deviations from the schedule, minutes of delay, which are then analyzed according to its causes of fault. Another important parameter of quality is impeccable transportation of passengers luggage, respectively cargo. An important sign of quality of service is waiting time to check-in counters at passport and customs control. The main objective of airports is to minimize the waiting time, while it is necessary to find a balance between waiting time and costs to achieve that.
- **value indicators** which govern each economic subject. These indicators include average revenue from airline fees per passenger which is important in the competitive relationships between airports themselves. Another indicator is the average revenue from business activities per passenger or unit of rented space. This indicator is used for monitoring the effectiveness of rent by tenants and individual business areas.

5. Measurement and evaluation of processes of airport

As the main factor associated with the type of aircraft is aircraft size and its associated time of technical clearance. Other factors that may affect the length of clearance may be type of company and type of flight. Extension of necessary time to clearance of aircraft is an extension of its non-productive time and reducing of its average daily use. For more effective passenger handling are developed new methods of traffic at airports, more advanced ways to operating flows of passengers, goods and cargo. The various companies vary the requirements for cleaning of aircrafts, refuelling and catering. The aim of air transport is to reduce passenger's required time spend at airport from their arrival to boarding to 15 minutes for a short flights and 30 minutes for a long distance flights. Implementation of the new technologies at airports such as web or mobile check-in systems to simplify traveling and increasing passenger comfort is in fact slow but surely becoming commonplace of airports with more traffic.

Implementation of self check system to airports meant a reduction in staff costs, speed up handling process and reduction of waiting time of passengers. Ensuring of process of air transport of passengers,

luggage, cargo and mail needs material's and technical basis based on widely using of mechanization and automation.

5.1 Analysis of airport processes

In analysis of airport process we monitor:

- from what parts the process is composed,
- parameters of various parts of airport process,
- input parameters,
- method of measuring of parameters,
- how can be these parameters affected by conditions,
- which variables and constants exit from operations of airport process,
- searched result,
- result (in what measurable units),
- how can be found result used for other tasks such as:
 - management (management tasks),
 - optimization (increase efficiency),
 - quality (determine the capacity of objects),
 - quality (reliability),
 - security (in field of SAFETY a SECURITY).

5.2 Use of the results measurement of airport processes

Optimizing of processes in the operation of aircrafts, passengers and luggage depends on credibility, timeliness, accuracy and selection of critical parameters and on determining the conditions that affect the applicability of obtained conclusions.

In individual performance and economic paramters of airport is necessary to monitor the change (distribution) of their values during day, week, month and year, possibly trends of its development over several years.

An important element of scientific forecasting is modeling - a method of creating and exploring analogue object, which is called its model. The measured values of process parameters of handling of aircrafts, passengers and luggage will serve as input for airport porcess model that allows you to optimize required number of resources (equipment and staff) for each handling subsystems.

6. Conclusion

It is necessary that the monitoring, evaluation and optimization of costs and processes of airport became a permanent part of menagement process. Costs of airport infrastructure are pretty much independent at actual performance conducted at airport because they are associated with required capacity of airport. Therefore it is important to expand airport capacity as expand demand for air travel. Any larger or smaller airport has a partial influence on its surroundings, whether positive or negative. Regard to growing use of air transport is necessary to try not underestimate and reduce negative influence as far as possible. Measurement and evaluation of parameters of airport processes is necessary in case that the airport has made progress in number of flights and passengers, so there will be situation where it would be necessary to increase the number of parallel service lines or implementation of new technologies to streamline the airport operations. It is also necessary in decrease of number of flights and passengers, when is need to reduce tha capacity of handling subsystems in order to achieve the desired efficiency.

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The assessment of the contribution of aviation to the national economy

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Abstract

The article deals with the assessment of the contribution of aviation to the national economy. In the article is compared the magnitude of the impact of aviation on GDP with development of the networks of aviation in the country. The example shows the impossibility of comparing three different economic entities without considering their economic status.

Key words Air transport, Gross Domestic Product, national economy

1. INTRODUCTION

Transport is one of the key factors in the development of any modern society, while itself is not a goal but a means of economic development and a precondition to the achievement of social and regional

cohesion. Transport in its specific function operates across the economy and connects various sectors, enables overcome distances, improves the division of labor in the production, promotes productivity labor and capital which promotes the growth of prosperity and economic competitiveness. Transport is important factor affecting the economic development of the technology environment.

2. AIR TRANSPORT AND GROSS DOMESTIC PRODUCT (GDP)

Air transport is characterized by some properties that determine its position in the transport system of the state. Fact that is the fastest of all branches of transport which provides transportation of passengers, mail and certain types of goods, air transport can helping to improve the management of the national economy and accelerate the cycle of current assets. Air transport must comply in particular with the following requirements so as to fulfil its role in the transport system of the State: speed, safety, quality, efficiency.¹

National economy refers to a country's financial resources and its financial management with a view related to its productivity. It involves the sectors of the production sphere in which material social product is made and sectors of the nonproduction sphere, where non-material services are established.²

Gross Domestic Product - GDP - The monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.³

GDP of selected countries

- Slovak Republic



Figure 1 Slovak Republic - GDP 15

- Czech Republic

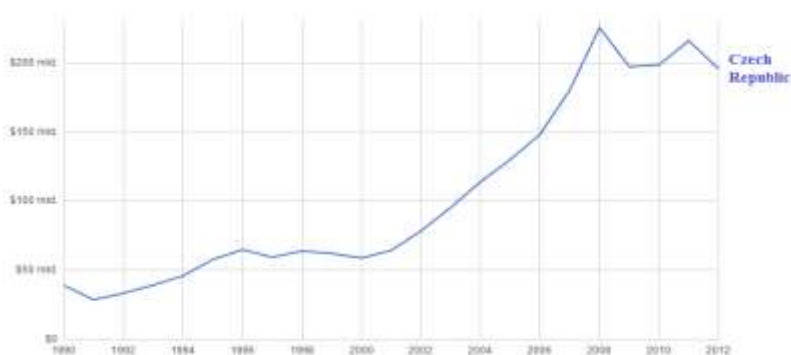


Figure 2 Czech Republic - GDP 18

- United Kingdom

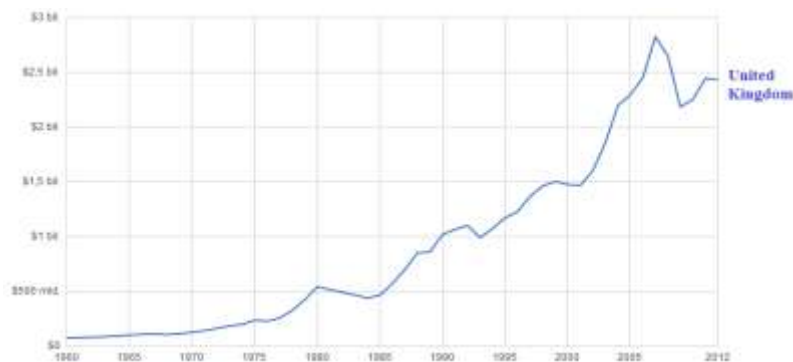


Figure 3 United Kingdom - GDP 16

- United States

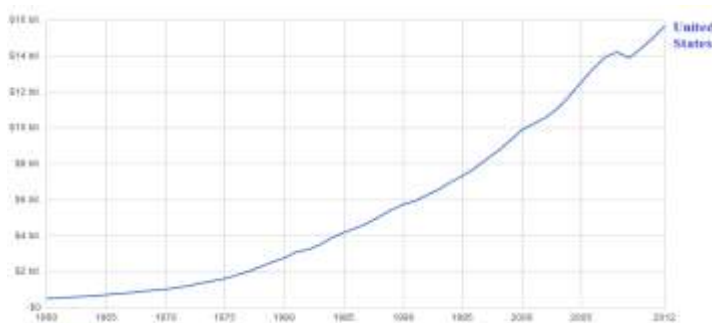


Figure 4 United States - GDP 17

3. AIR TRANSPORT AND ITS REFLECTION OF A COUNTRY'S GDP

Impacts of aviation on the economy of the state:

- Direct impacts - employment and direct business activity (aircraft operators, airport operators, air navigation service providers, other providers of air services)
- Indirect impacts - employment and business supplier activity
- Induced impacts - associated with expenditures of persons directly or indirectly employed in the aviation sector
- catalytic impacts - air transport as a catalyst for growth in other sectors - GDP growth

Benefits of air transport from the perspective of its effect on the country's GDP:

- Self-financing - does not directly burden the state budget
- Liberalization and harmonization
- Long-term growth
- Security
- Accessibility
- Employment
- High added value

3.1 European Union - external policy in aviation sector

European airlines and airports have the leadership position in the world as well as the European airline industry. It will be extremely difficult to maintain this position in the global market due to capacity constraints in Europe and massive investments in air transport infrastructure in other regions.

Maintaining a competitive European aviation system and the key role of Europe as an intercontinental hub of air transport will have a broader importance for the European economy.¹³

Aviation plays an important role in the European economy for EU citizens, as well as for industry. Support 5.1 million jobs and the share of European GDP of € 365 billion, or 2.4% provides a significant contribution to economic development, employment, tourism, as well as regional and social cohesion of the Union. Over the last two decades, the EU transformed and integrated the fragmented national markets into a single and the largest open regional market aviation in the world. According to forecasts, the development of aviation moves to areas outside Europe. It has seen at the basis of expected average annual GDP growth rate (2011 - 2030):

- Europe - 1,9%
- India - 7,5%
- China - 7,2%

It is expected that the flow of international aviation is focused on Asia and on the Middle East. 4

To the state budget do not contribute only income derived from the air transport directly but from all of its supply chain. Aviation supply chain consists of:

- Airlines
- Airports
- Lessors
- Manufacturers
- Cargo carriers
- Ground staff
- Catering
- Travel agency
- and other.

4. COMPARISON OF THE CONTRIBUTION OF AVIATION TO GDP IN SELECTED COUNTRIES

In this section we compared the share of the contribution of aviation to the GDP of the country in three countries, namely:

1. Czech Republic
2. UK
3. United States 14

4.1 Czech Republic

Air transport sector contributes 24.0 billion. CZK (0.7%) of GDP of the Czech Republic. This contribution consists of:

- Direct outputs from aviation (airlines, airports and ground service) - 11 billion CZK
- The aviation supply chain contributes indirectly - 7,8 billion CZK and
- Costs of employees and of supply chain are contribute 5,1 billion CZK

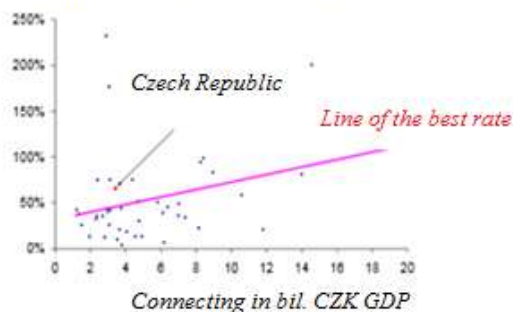
In addition, 7.4 billion CZK arise from increasing the benefits of tourism.

Connecting, 2010



Source: IATA

Foreign direct investments and connecting Foreign direct investments as % GDP



Source: Oxford Economics/IATA

Figure 5 aviation network of the Czech Republic

4.2 United Kingdom UK

Air transport sector contributes £ 49,6 billion. (3,6%) of GDP of the UK. This contribution consists of:

- Direct outputs from aviation (airlines, airports a ground service) - £ 21,3 billion
- The aviation supply chain contributes indirectly - £ 16,3 billion and
- Costs of employees and of supply chain are contribute £ 12,0 billion

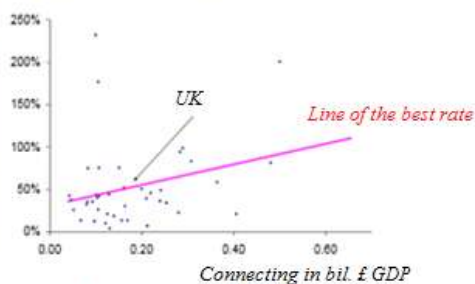
In addition, £ 20,7 billion arise from increasing the benefits of tourism which increased total contribution to £ 70.3 billion or 5% of GDP.

Connecting, 2010



Source: IATA

Foreign direct investments and connecting Foreign direct investments as % GDP



Source: Oxford Economics/IATA

Figure 6 Aviation network of the UK

4.3 United States

Air transport sector contributes in GVA (gross value added) \$ 669,5 billion. (4,9 %) of GDP of the US. This contribution consists of:

- Direct outputs from aviation (airlines, airports a ground service) - \$ 206,4 billion
- The aviation supply chain contributes indirectly - \$ 169,4 billion and
- Costs of employees and of supply chain are contribute \$ 127,4 billion

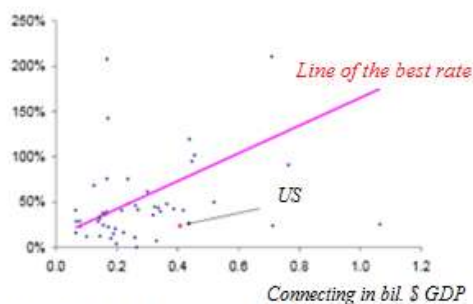
In addition, \$ 104,5 billion arise from increasing the benefits of tourism. Domestic tourism is growing and brings \$ 61.8 billion. representing 4.9% of GDP.

Connecting, 2010



Source: IATA

Foreign direct investments and connecting
Foreign direct investments as % GDP



Source: Oxford Economics/IATA

Figure 7 Aviation network of the US

4.4 Final comparison

TABLE - 1 Conversion of contribution of aviation selected countries (€)

Country	Czech Republic	United Kingdom	United States
Total only air transport	8 850 536 563,78	59 132 093 466,86	495 302 212 029,3
Total with tourism	9 123 428 080,83	83 810 205 054,84	572 612 266 035,37
Air transport directly	405 649 592,51	25 393 419 170,24	152 696 604 276,1
Supply Chain indirectly	287 642 438,3	19 432 522 651,41	125 323 666 494,04
Spending on staff and supply chain	188 073 901,98	14 306 151 645,21	94 251 683 065,77

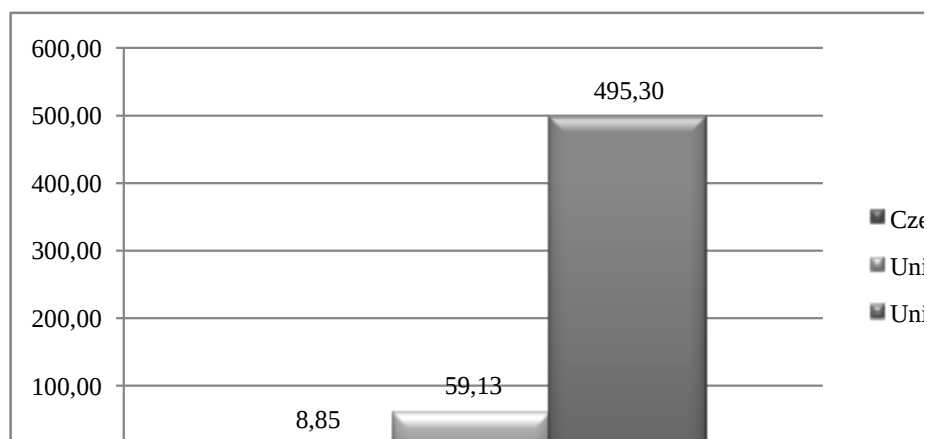


Figure 8 Comparison of the contribution of aviation to the national economy in selected countries in billions €

Table 1 shows a summary comparison of selected countries and their contributions to the country's economy. Prices are calculated according to the current exchange rate of the National Bank of Slovakia. As we can see the contribution of this type of transport in these countries is incomparably different. These countries, I give as an example, that the comparison of economic indicators of individual countries need to also be based on their economic situation. It is obvious that the comparison of the Czech Republic and the United States in economic terms is not predicative, as well as their gross domestic product are diametrically different (as we have seen in Chapter 1).

For comparison, we could take into account, percentage contribution of aviation in the country's GDP. In this case, it would look like this:

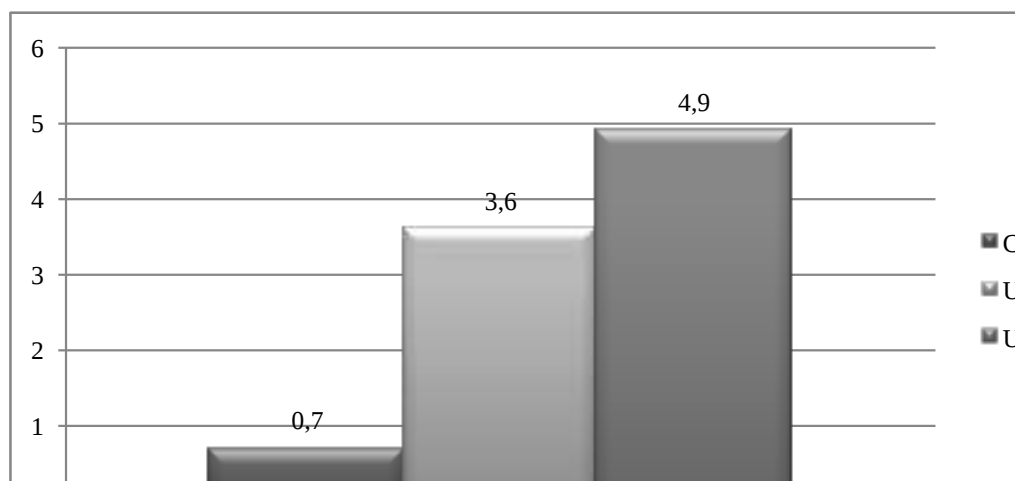


Figure 9 Percentage contribution to GDP

5. CONCLUSION

Based on these results, we can point out that air transport is a significant contributor to the country's GDP and the size of its contribution to the national economy is directly proportional of development to this type of transport of the country.

By comparing the three selected countries, we came to the result, that is impossible to compare the diametrically different economic entities on the basis of economic indicators. For this reason, comparison of the benefits of aviation to the national economy we made based on the percentage contribution of aviation. As we saw in this respect from those countries leading the United States.

The contribution of air transport are increasing and therefore it is necessary to continually expand this type of transport in the country. Additional results in this sphere are the subject of further research.

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Prof. Ing. Jozef LEŠČIŠIN, CSc. – Prešov University, Faculty of Management, Department of Finance and Accounting

Review of the Monograph

by Ing. Jozef ADAMKO, PhD on the topic: Insurance Marketing

The monograph is the result of the author's longtime practical experience as well as his theoretical approaches in the insurance business management and marketing where he had been working. At the same time, as a theoretician, he had been acting as an external teacher at Prešov University - Faculty of Management where he obtained a PhD in the mentioned issue.

In the monograph, the author describes the current status of marketing at home and in a foreign environment and points to some specifics in insurance marketing. He also presents the new trends in Internet marketing (guerrilla, viral, holistic, eventually mobile, Internet marketing, and others).

The second chapter describes the marketing communications in insurance business under which the author describes the communication mix, marketing communication tools, sales promotion, personal selling, Public Relations, direct marketing, strategic marketing, CRM, marketing planning and marketing strategy design.

The entire second chapter has been elaborated in detail so the reader is provided with sufficient information on the related field.

In the third chapter, "The New Trends in Marketing, E-Marketing", the author explains the so called continuous mobile marketing as the new marketing trend, which is defined as a set of procedures which enable organizations to communicate and collaborate with their audience. Further on, he states the factors supporting the sale of insurance products, Internet marketing, distribution channels of commercial insurance companies, trends in online insurance, models of online insurance in Europe and Slovakia, the comparison of types and models of online insurance.

The fourth chapter describes the legislative amendment of the insurance market and explains the legislative framework of insurance. This chapter explains the financial intermediation and consulting as well as their characteristics.

In the fifth chapter, the author deals very briefly with the description of the financial market.

In the sixth chapter, the author describes the insurance market and its segments, insurance market indicators and reserves. Furthermore, the chapter contains the analysis of the

internal and external environment of insurance companies, online marketing research, communication channels in the insurance industry and examples of e-insurance in our country.

In conclusion, the author notes that the submitted monograph has been elaborated based on many years of his practical and theoretical experience in the given field and I believe it will enhance our book fund. In the monograph, the reader will find the author's interesting approaches and recommendations.

Košice, on 21st November, 2013

Review of monograph Implementation of financial and statistical models in terms of company 21. century

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Review of monograph by Ing. Sylvia Jenčová, PhD. and Mgr. Eva Litavcová, PhD. on topic: Implementation of financial and statistical models in terms of company 21. century. Brno: Tribun, s.r.o. 1.vyd. 1321s. ISBN 978-80-263-0537-8.

The monograph is the result of many years of theoretical and practical experience of the authors in this issue. Both authors are working at FM PU. Ing. S. Jenčová, PhD. at the Department of Finance and Accounting and Mgr. E. Litavcová, PhD. at the Department of Quantitative Methods and Management Informatics, where they are actively involved in both teaching and scientific research.

This monograph consists of six logically following chapters. The first chapter contains theoretical knowledge bases as well as the definition of the model and modeling. The second chapter sets out the models at the micro level and contains in details worked out analytical proposals of pyramid models and impact quantification of determining factors, causative factors on the overall

profitability of the company and the implementation of technical and financial analysis of a particular analyzed company. This chapter provides a theoretical, mathematical and graphical processing of financial models under modern methods of company performance rating, that are applicable for financial management of a company in Slovakia. The third chapter points at the implementation of selected

statistical methods, describes the problems of regression analysis and time series for the analyzed company. The fourth chapter contains issues of simulation. The dominant feature of the chapter is the design of simulation model, fully applicable for the financial management of the company. Within the simulation there are experiments, with various solution variants. The fifth chapter explains effectiveness analysis, implementation of matrix system of financial metrics and performance analysis of business entity. The sixth chapter contains examples of development predictions of selected economic variables of a specific company, using time series analysis. The data of analyzed company are processed in programs MS Excel, SPSS and STATISTICA.

At the end, the publication is complemented by a rich educational apparatus attachment in the form of tables and graphs.

This monograph is processed at a high professional level and is useful for both practitioners as well as for researchers. It is a good contribution to the scientific literature, and guarantees the scientific originality.