

# **The Role of Management Functions in Successful Enterprise Performance**

***Monograph***

**Editors:**  
**Felicjan Bylok**  
**Anita Tangl**

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## FOREWORD

In our time, globalisation represents a key driver of world economy. The main trends are about reducing and removing the barriers between the national economies and about stimulating to build connections between these economies. The changes of the external environment highly determine the market, production processes and organizational structure of the enterprises and these changes will bring a need for changes in the managerial functions as well. With the growth of markets towards globalisation, all enterprises need to deal with new challenges facing them.

This book encompasses the latest results of international authors and provides a collection of new methods and theories on managerial functions from different countries.

The three chapters of the book are related to managerial tasks and functions. First chapter summarizes the managerial tasks and most challenging issues of management of our time in different sectors of economy. Second chapter deals with the human side of management, with a special focus on social responsibility, ethical questions and social capital, while in the third chapter a variety of financial and marketing topics are discussed.

The book is addressed to both theoreticians and practitioners in different fields of management and education: for company managers, researchers and professors, and of course for students, graduates and PhD students. The findings of the international team of authors may provide new inspirations for the readers either for further discussion or the improvement of managerial solutions.

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# **CHAPTER 1**

## **Management tasks in different fields of economy**



*Felician BYLOK*

## **1.1. MANAGING EMPLOYMENT IN PROCESS OF RESTRUCTURING ENTERPRISES**

### **Summary**

The aim of the herein paper is to present the theoretical conditioning of employment in the processes of restructuring enterprises. The author describes the significance of the human factor in the process of organizational change. The preparation of a personnel strategy that is strongly integrated with the general strategy of an enterprise is a fundamental element in the management of human resources in a restructured enterprise. On the basis of the personnel strategy adopted, it is possible to prepare a social plan of restructuring in which propositions of change should be included in the area of the employment of workers remaining in the enterprise and those leaving. Great significance is attached to the problem of the adaptation of employees to the new organizational conditions. For the adaptation to be rapid and effective, the management is required to build the policy of reconversion where the perception of the employee as human capital would be of importance thanks to which it is possible to compete with other enterprises. In the process of restructuring in enterprises, partnership culture that is associated with organizational identification may be useful in which, mutual cooperation exists between the management of the company and the employees. This culture is based on the feeling of involvement, solidarity, trust and interdependence. Mutual partnership ties are the basis of the success of an enterprise.

**Keywords:** enterprise, restructuring, employment, human resources, organizational culture

### **Introduction**

In today's market economy enterprises are forced to adjust to the constantly changing external environs, which in turn leads to the implementation of organizational change. This sometimes takes on the form of restructuring which is defined as a well thought-out reorientation of aims (mission) of an enterprise that are adequate to the existing or forthcoming changes in the environs in the future, while also adjustment of techniques, organization, economics and personnel to the aforesaid changes (Nalepka, 1998) Restructuring relates to assets, capital, employment, as well as organization and ownership structures (Kozuch, 2010).

In the process of restructuring, those managing the enterprise concentrate to a large extent on the aims associated with finances, whereby activities in this area are to improve the standing of the enterprise and its cash flow. Nevertheless, it is not possible to avoid the social aspect of restructuring, as the changes occurring in the

sphere of personnel management are the most visible. The process of restructuring frequently comes down to the reduction of the general number of those employed, which is equated to the decrease in the level of labour costs (Oleksyn, 2000). As illustrated by empirical research in Poland, in the period of crisis enterprises carrying out restructuring pursue the reduction of the work timespan, reduction of remuneration and reduction of employment levels (Chodorek, 2010). Restructuring employment levels should not be merely a reduction of the personnel as it also provides the opportunity of increasing the effectiveness of the employed workers. In a restructured enterprise, a significant task for the managerial staff is the building of the strategy of employment that facilitates the realization of rational employment in an enterprise in the period of change (Illés et al., 2015).

The aim of the herein paper is to present the theoretical conditioning of employment in the process of managing employment in the processes of restructuring enterprises. The research method that has been applied is the method of critical analysis of subject-related literature.

### **Essence of restructuring of employment in an enterprise**

In subject-related literature the restructuring of employment is defined as a set of activities adjusting the state and structure of the employed personnel to the prevailing conditions rendering the realization of the aims of an enterprise possible (Lachiewicz et al., 2005). Simultaneously, this not only refers to the reduction of employment levels with the aim of restricting the costs of activities, but also adjusting the number of employees to the current needs and strategies of the enterprises at hand. The fundamental activities associated with the restructuring of employment may enumerate the following: (Czekaj, Zakrzewska-Bielawska, 2006);

- Rationalization of the structure of employment in an organizational and occupational structure;
- Changes in the level and nature of qualifications leading to growth in terms of the competences held by employees that are required for the new needs of the organization;
- Changes in the structure of employment in accordance with age and seniority, thus leading to the rejuvenation of working staff, or to the creation of preferences for the specific types of professional experience;
- Improvement of the processes of personnel management such as the following: recruitment and selection, internal recruitment for specific types of work positions and systems of employee training;
- Adjustment of the motivational systems to the changed conditions of the functioning of an enterprise, e.g. new ways of motivating employees associated with the requirements of labour efficiency;
- Changes in the principles of the management of working time of personnel by means of implementing flexible forms of working time.

Hence, it is possible to acknowledge that the restructuring of employment is not associated with only the reduction of the personnel employed, but also relates to the

issue of employee transfers associated with new tasks, promotions and retraining associated with the pursuit of increasing labour quality and efficiency.

Restructuring of employment may adopt two forms as follows: corrective and development actions (Czekaj, Zakrzewska-Bielawska, 2006). The first form is connected with the pursuit of the achievement of clear and fast economic effects by means of the radical reduction of employees in the mode of individual and grouped redundancies. This usually occurs together with corrective actions associated with other areas of the functioning of enterprises, e.g. discarding the surplus fixed assets. In turn, developmental restructuring is aimed at the comprehensive and long-term activities associated with adjusting the magnitude and structure of employment to the strategies of an enterprise. This is connected with building long-term plans for the development of human resources, together with ensuring the possibilities of the realization of the individual paths of development for employees. In terms of the long-term perspective of the activities of an enterprise, developmental restructuring is significant, whereby it favours the development of an enterprise and improves its market situation.

Restructuring is a process that requires precise preparation as it is associated with, among others, the risk of the lack of acceptance of change on the part of employees, while also the risk of qualified staff leaving. One of the stages of restructuring is the preparation of a plan. Elements of this plan should be as follows: diagnosis of the current state of employment and the hitherto level of its effectiveness in the context of both internal and external requirements, namely, the market environment, evaluation of the state of employment and predictions of the personnel needs; specification and acquisition of the necessary resources for restructuring, making changes in terms of employment from the viewpoint of the transformation into other areas of activities, implementation of strategic and operational functions of planning employment, as well as carrying out qualitative transformation in terms of managing human resources (Sajkiewicz, Sajkiewicz 2002). The plan of restructuring should be connected with the personnel strategy and social plan minimizing the reluctance of employees towards changes.

#### **Personnel strategy as an element of the process of restructuring of employment**

The first stage of managing employment in the process of restructuring is the preparation of the personnel strategy that may be perceived as a long-term concept relating to employee resources leading to their appropriate formation and involvement with the aim of supporting the enterprise in terms of attaining market success (Listwan, 2006). Its aim is to define the directions and ways of utilizing human resources in the pursuit of achieving the aims of the enterprise itself. Creating the personnel strategy comes down to the constant improvement of the particular elements of human potential with the aim of adjusting them to the emerging changes within the enterprises and its environs (Pocztowski, 1998). In formulating the personnel strategy, the management of the enterprises is in search of the answers to the following questions:

- What is the state of the enterprise in terms of human resources?
- What state of employment do we assume to attain over a specified long-term period?
- What methods are we to avail of to achieve this level?

One of the elements of the personnel strategy is the personnel plan which fulfils a multitude of functions. Firstly, it signifies the prediction of the necessary number of employees over a specified time scale and location with the appropriate qualifications and modifications to the state and structure of employment, as well as the mutual subjection of the employees to the particular organizational cells and work positions (Pocztowski 1998). Secondly, the personnel plan is correlated with information about future personnel changes on the internal labour market, together with information flowing in from the external market and labour law (Oechler, 2000). Thirdly, personnel planning is integrated with other plans within the enterprise, e.g. with the investment plan. Hence, the personnel plan should contain methods and means of the professional adaptation of the employees remaining in the company, as well as taking account of the future personnel needs arising from investment programs.

Personnel planning in an enterprise encompasses such areas of planning as the following: planning personnel needs, planning personnel equipment, planning staff redundancies, planning staffing, planning personnel development and planning personnel costs (Oechler 2000). The focal point in the planning of human resources is the plan of personnel needs that prepares the tasks arising from the other partial plans of the company (e.g. investment plan) and the specification of the qualitative aspects, time and location of demand. The principal aim of the analysis of personnel needs is the specification of the desired number of employees of specified qualifications that are essential to the realization of the planned program of activities of the enterprise. Information stems from the plan of personnel needs with regard to future changes in the state and structure of the existing employment levels (Fehér, 2015).

A significant aspect of personnel planning lies with the planning of personnel positions. The aim of this planning is to subject the employed personnel to the existing organizational cells, work positions and activities. The basic functions of this plan are as follows: minimization of the costs arising from the optimization of the subjection of the work positions and employees on the basis of the established economic criteria and the maximization of the usefulness of employees for the execution of tasks in the specified work position (Pocztowski, 1998). A staffing plan of work positions provides the possibility of establishing the staff of employees that have potential in the sphere of increasing their professional efficiency which may be availed of in the future for taking on higher positions.

A staffing plan of work positions is integrated with the plan of personnel development. The principal aim of personnel development is the improvement of the potential of the work of individual employees with the aim of adjusting them to the changes occurring in an enterprise and its environs. During the course of building the plan of personnel development a list of questions to be answered is useful (Wagner, 1994):



- What shall be the tasks and requirements with regard to employees in the future?
- How do the abilities and development potential of an employee look?
- Who should train?
- What is the demand for a specified type of qualification of employees?
- What is the budget at the disposal of the firm?
- Who may and who should take the managerial positions?
- What should be done in order for the transfer of an employee to a higher position in the structure of authority to be safe?

The answers to these questions facilitate the establishment of the quantitative and qualitative frameworks of the groups of employees that shall be taken into consideration in terms of the nominations for the managerial positions. Career paths are created for this group, which are one of the most important composite elements in the plan of personnel development.

Planning in the area of human resources also includes a plan for the reduction of employees arising from for instance, the changes in the competitive environs of the company. The management, by means of entering a social agreement with the representatives of the employee team may reduce the specified number of work positions that have ceased to be necessary in the enterprise.

In the case of planning employment in a restructured enterprise, we are faced with the dilemma of whether to lay off older employees and employ younger and better educated ones with higher qualifications to take their place, or rather propose the retraining of the employees hitherto employed in the company. The choice of the course of action is very important as it is associated with the adoption of the specific strategies of actions and specific social and economic costs. The second solution is supported by moral and social aspects, however the first solution is more favourable from an economic viewpoint.

Planning the state of employment is a difficult task which is what a manager is faced with, but which also brings tangible benefits. The benefit of planning human resources is first and foremost the optimal use of employees and the transparency of the processes occurring in the enterprise, while secondly it facilitates the definition of the needs in terms of the numbers and competences of employees, as well as the undertaking of action in advance in order to satisfy these needs and thirdly, it creates the perspectives of professional development for active employees.

#### **Social plan of restructuring of employment**

Restructuring in the social sense is perceived as the process of making people redundant and with relation to this fact, the reluctance of employees with regard to the proposed changes arises. With the aim of minimizing the reluctance of employees, a social plan should be created relating to the changes in the area of the employment of the workers remaining in the enterprise and those departing. The essence of the social plan is to ease the effects of the transformation in the area of human resources. The content of the social plan may encompass the following

issues: problems and threats associated with the implementation of change; the proposed ways and means aimed at resolving these problems and threats; the identification of employees included in the plan, as well as the adopted criteria and means of their identification; the system and methods of aid in terms of the preparation by employees of their individual professional balance; the policy of reconversion encompassing the program of adaptation of employees to the changed conditions (Egeman, 2000). Thus, a social plan should on the one hand, contain the methods of professional adaptation of the employees remaining in the enterprise in terms of the new working conditions, while on the other hand, the means of aid for the employees made redundant.

The most important section of the social plan is the adaptation of the employees to the changes evoked by the process of restructuring. The process of adaptation signifies the adjustment of an individual to activities in a specific tangible and social environment. In the case of social and occupational adaptation, we are referring to the processes by which an employee adjusts to his/her workplace, namely: to the spaces, equipment and location in the natural environment; type of production or service; system and nature of work; methods of management and the existing social ties; the system of tangible and intangible incentives; social and living conditions, etc. (Sztumski, 1999). This process involves the formation and development of the essential competences of the employees, namely their knowledge, skills, experience and attitudes in the new conditions (Bahrami et al, 2016).

Adaptation in the processes of restructuring may take on the following forms (Czekaj, Zakrzycka-Bielawska, 2006):

- Re-grouping, namely professional adaptation involving the re-hiring of a worker for a work position similar to the hitherto position held;
- Retraining, namely adaptation involving the employment of a worker for a work position that significantly differs from the hitherto position held, which requires new qualifications and competences.

The process of adaptation of employees to the new conditions shall conclude successfully when the aim of the organization has been achieved, namely when an employee becomes familiar with the tasks involved and shall execute them successfully and shall identify with the aims of the enterprise and the values of the organizational culture (Kieser et al., 1990, Hurta and Dunay, 2013).

With the aim of streamlining the process of adaptation of an employee to the new working conditions, the following questions may be of use:

- What does an employee expect from the new work position or from the enterprise?
- What do the future co-workers expect from the newly-recruited worker?
- What do the superiors (personnel manager / direct superior) expect from the new employee?
- What information does a new employee need in the new workplace?

In the process of adaptation of an employee to the new working conditions, a significant tool that streamlines this process is the individual plan of implementation for the new workplace, in which the joint discussions with the superior relating to

the difficulties and problems of adapting for the employee to the new working conditions are taken into account.

The social plan of restructuring also includes activities on behalf of the employees made redundant. It would seem that the most appropriate practice with regard to the good of the employee is that of outplacement, which is a planned program of employee redundancies that is aimed at easing the new occupational and living situation for these employees (Małachowski, 2006). In practice, this occurs in the form of active support for people made redundant from their hitherto workplaces by means of providing aid in terms of finding new jobs, as well as training and information about the local labour market, assistance in terms of retraining, as well as psychological and legal support (Barcik, Dziwiński, 2016). Research on Polish enterprises indicates that it is most frequently executed in large enterprises. This is the result of among other things, a more developed organizational culture, as well as the awareness of how important the research on public relations is and how important the image of the enterprise is in its own internal and external environments (Jasińska, 2010).

#### **Partnership organizational culture as a factor supporting the process of restructuring of employment**

The implementation of the program of restructuring in an enterprise is the realization of two fundamental aims as follows: maintaining the organization on the market and leading to the achievement of profit. In order for the aims of the enterprise to be achieved, it must on the one hand adapt to the variable market conditions, while on the other hand minimize the resistance of the employees towards the organizational change. This aspect may be aided by the partnership organizational culture that supports the process of adjusting the employees to the changed working conditions. This is based on trust, responsibility, self-initiative and creativity. The basis of such an organizational culture is the employer-employee relation, thanks to which responsibility, cooperation and the community of interests are formed. The shape of these ties is influenced by the participation of the employees in the internal processes of information, communication and decision taking (Beyer et al., p.19).

In the model of partnership organizational culture, an employer delegates some of his/her authority to the employees by acknowledging that this is the best alternative for the development of the enterprise. In return, he/she expects involvement and responsibility from the employees. Nevertheless, the employer participates in the decision making processes in the enterprise as he/she has a vested interest in such, namely he/she shall not lose his/her position as a result of the process of reorganization, yet in addition to this shall gain the opportunity of individual growth. In both cases, the conditions are of mutual trust and mutual interdependence. When these conditions are fulfilled, the mutuality of interests occurs and the partnership organizational culture is formed.

Including employees in the decision making process is an action aimed at informing the employees better in terms of the organization and increasing their level of

involvement in its matters. The initiative lies with the employer, who provides the employees with the opportunity of active participation in the life of the organization. By implementing this, he/she assumes that the employees have huge potential that is unavailed of, but the managers retain the right to manage. The process of including employees in the life of the organization may take on the form of participation, which may be defined as the impact of the employees on a wide spectrum of issues associated with the organization, work, as well as the principles and conditions of work that involve deliberations and negotiations (Amstrong, 1998).

Employee participation mainly arises from instrumental motives. The management acknowledges that it is a very good medium for strengthening, as well as engaging and motivating the employees in order for them to realize his/her policies (Moerel, 1995). The attainment of a common understanding in terms of the scope of the employee participation, which is binding for both sides, should be documented in written form. The written declaration of cooperation constitutes the basis of common activities (Beyer et al., 1994).

Nevertheless, it is necessary to emphasize the fact that the partnership culture of an organization in contrast to employee participation does not only arise from economic premises, but also from moral premises based on basic values: justice and equality. Partnership culture is the realization of the vision of an enterprise that is oriented towards its employees. Partnership ties between on the one hand, the employer, while on the other hand the employee, require building trust, cooperation and the community of interests. The employees are expected to provide their creativity and personal involvement on behalf of the enterprise. Simultaneously, the employer must contribute in terms of building partnership ties by means of allowing employees to participate in the information and decision making processes.

An example that illustrates the significance of partnership culture in the process of restructuring is that of the company Farben GmbH, which operates in the chemical sector on the domestic market of Germany and international markets (Bertelsmann Stiftung, 2000). In the 1990s, the company fell into crisis after a period of growth in terms of the sale of their products. This was the consequence of a fall in the profitability of the investment in the sector of paint and the lack of a long-term strategy of development. The high personnel and social costs in comparison with competitors were not possible to sustain over a long period of time and action had to be undertaken to restrict them. By way of consequence, the management took the decision to reduce the personnel by a total of 800 employees. The loss of such significant human capital and part of the market forced the enterprise to reorient its activities. This meant the reconstruction process in the company in favour of policies geared towards the market and the competition. In this process, an important role was played by the emphasis on the partnership ties between the employer and the employee. These were featured by openness in terms of communication and informing of the aims of the reconstruction process and the subsequent stages of reorganization. Trusted representatives and the management of the company actively participated in this process, who by means of direct contact with the employees alleviated their fears in terms of the future and indicated the benefits associated with the changes, namely the opportunities for the company and the employees in terms

of development. Thanks to these actions, the employees changed their attitude to the enterprise. The perception of it as a good workplace with large perspectives of development became prevalent and the employees became its ambassadors on the local environs, which was a new and positive experience for a multitude of employees.

The partnership culture of the organization also shaped the communication between the managers and the employees which took on the form of partnership talks. This model of communication was practiced by the blue-collar workers right up to the general manager and became an element in the achievement of common aims.

The institutionalized form of mutual ties of the employees with the management of the firm was the creation of the position of co-manager that was taken by a representative of the employees working on behalf of their interests. Understanding and the cooperative attitude of the management of the enterprise, as well as the constructive strengthening of the interests of employees have become the basis of the success of the company Farben GmbH. At present, the enterprise is indicated as a positive example of the achievement of success by means of the realization of the process of the sanctions of the company with the understanding and cooperation of the employees.

### **Conclusions**

Restructuring of employment in an enterprise constitutes an intricate process, in which it is necessary to take account of the individual features of an employee and his/her attitude to the enterprise. The process of restructuring employment may only be accepted by the employees when it ensures the fulfilment of their needs and leads to their development. In order for an enterprise to be able to realize these intentions, it should prepare a plan of restructuring, in which a realistic and credible vision of the future of the firm is stipulated (medium-term and long-term effects, as well as “the price to pay”). In this plan, the plan of social restructuring is of great importance. The aim of this plan is on the one hand, the conviction and mobilization of employees to make this vision a reality, while on the other hand, rendering the specification of the target number and competences of employees that are necessary for the realization of the vision of the enterprise. In practice, conflict situations frequently occur that are the result of accepting the social plan in which propositions of large reductions of employees are stipulated and the lack of aid for the employees made redundant in terms of the search for new work. Such practices evoke protests that end up as strike actions. In order to avoid such situations, the management of the restructuring enterprise should help the people made redundant in tandem with the local authorities in terms of finding new employment, e.g. by means of organizing training that facilitates the retraining of the people made redundant, or training courses to help them adjust to the new conditions.

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Viktoria JÓZSA

## **1.2. SLAVEHOLDERS OF THE MODERN AGE OR POWERFUL ALLIES? THE LOCAL INTEGRATION OF LARGE COMPANIES**

### **Summary**

Reindustrialisation is one of the strategic priorities of the European Union. Now more than ever, Europe needs industry and industry needs Europe. The European economy needs to get back to a growth path. This requires coherent and coordinated industrial policies from the Member States (EC, 2010). The question is that how this objective can be achieved and what is the role of large companies in this process. Regarding Central and Eastern Europe, in most countries national economies are catching up in terms of GDP per capita while their specialisation is high in high-innovation intensity sectors and technology-driven industries (EC, 2011). In the region, Hungary is one of the countries where automotive industry has an outstanding and continuously increasing importance. The author's basic hypothesis is that multinational companies, OEM (Original Equipment Manufacturers) and Tier 1 (first level, direct suppliers of OEMs) both, can become strategic allies of local actors in the development path designation process of a specific location, especially in case of mid-size cities. Local integration of these companies is an ongoing process, supporting the shift of these former 'low cost locations' to higher value-added locations. The borderline between the traditional sector of local economy and the exogenous actors is becoming less definite and the subsequent development activities are strengthening the endogenous potential of the area. The objective of the study is to prove the hypothesis by specific examples and to contribute to the definition and better understanding of the success factors and obstacles in this process.

**Keywords:** local integration, large companies, helix models, endogenous development, SMEs

### **Introduction**

According to Friedman, globalisation 3.0 has brought a shift in the drivers of globalisation and created major new challenges for local economic development (Friedman, 2005). The solutions called for an orientation toward ensuring that all participants in a local economy make maximum contributions. The recovery from the global recession means a clear shift from the "traditional" ideas and requires an economy focused on reinventing itself through new technologies, innovations, and renewed commitments to ethical leadership in both the public and private sectors. The competitive advantage of firms in the new economy has been greater specialisation that results in more interdependency with other firms and organisations, inter alia local supplier companies, governments, education institutions and local societies. When

leading-edge firms need specialised skills, they “hire” other companies and form ‘virtual corporations’ to produce one product or service and then recombine with entirely different sets of companies for another product or service. Firms with well-developed networks are flexible, able to identify and select strong suppliers as well as to penetrate new markets. In a networked economy, the skills of suppliers are as important as the skills within the firms (Blakely and Leigh, 2010). This process is very similar to what is called ‘matrix organisation’ in project management literature. Through networking and supplier development multinational companies and SMEs as members of the supplier network can reduce income-, earnings- and spatial inequality in a specific area that are resulted by globalisation. The Internet of Things, Industry 4.0, Smart Specialisation, Open Innovation 2.0, the triple, quadruple, quintuple and N-tuple innovation models are tendencies and approaches that shape our present and future activities. In a national and local context, new economic geography stresses the importance of spatial economics and the necessity of empirical and qualitative research on the meso-level (Krugman, 1998). This study aims to contribute to filling this gap in current knowledge.

## **Methodology**

The author’s basic hypothesis is that multinational companies, OEMs (Original Equipment Manufacturers) and Tier 1 companies (first level, direct suppliers of OEMs) both, can become strategic allies of local actors in the development path designation process of a specific location, especially in case of mid-size, or second-tier cities. They can contribute significantly to the successful and sustainable development of an area. Through the operationalisation of the so-called helix innovation models, their connections with the local economy, society, science, government and natural environment can be captured. Following the presentation of the global, Central European and Hungarian context, the author focuses on the role of multinational companies (MNCs) in the re-industrialisation process and their potential contribution to sustainable local economic development.

As geographical scope, Hungary, as part of the CEE region was identified. When examining the long-term changes in the industrial structures of the Member States of the EU in the period 1999-2007, the European Commission has identified four groups for analytical purposes. These groups of countries have followed different paths toward higher technology or higher skills industries. The groups were identified on the basis of similarities in character and trade trends, although this can still mask substantial differences within each group. Hungary, the Czech Republic, Malta, Poland, Slovakia and Slovenia have achieved a structural change from labour-intensive industries towards technology-driven industries on both production and trade (EC, 2011).

As sectoral focus, automotive industry and both OEM and Tier 1 companies are examined. The author presents three Hungarian case studies from Audi in Győr, Daimler in Kecskemét and Robert Bosch in Miskolc. The following complex set of criteria formed the basis of selection in case of the territorial units and the specific

companies: mid-size (second-tier) cities in the countryside with different geographical and logistic situation, history and traditions (1); different local economic structure and performance, core-periphery status, strong agglomeration (2); the representation of both OEM (Original Equipment Manufacturer) and Tier 1 (direct or first level supplier) companies in the sample (3); sectoral and geographical focus on automotive industry and European companies (4); different stages of the integration process and time horizon (5); prioritised development centres with advanced local economic development capacities (6).

The research has a strong empirical character and is process-oriented. The most recent industrial statistics and reports form the basis for references. As theoretical background, the triple, quadruple, quintuple and N-tuple helix models are addressed, as explanatory models for analysing the knowledge-based economy (Etzkowitz and Leydesdorff, 2000). The innovative nature of the research can be captured in its approach as focusing on the meso-level processes and in its aim to construct a process model on the basis of subsequent steps and milestones as means of verification instead of quantifiable, project level indicators. The author operationalises the helix innovation models in a real-time local environment in order to identify and present the connections of large enterprises with the local, integrative environment. The identified steps and process model of local integration can be tested in other CEE regions and can form the basis of multi-country comparisons and a tool to support smart policy-making. The objective of the study is to prove the basic hypothesis by specific examples and better understand the success factors and obstacles in this process.

### **Global, EU and National Context of the Research**

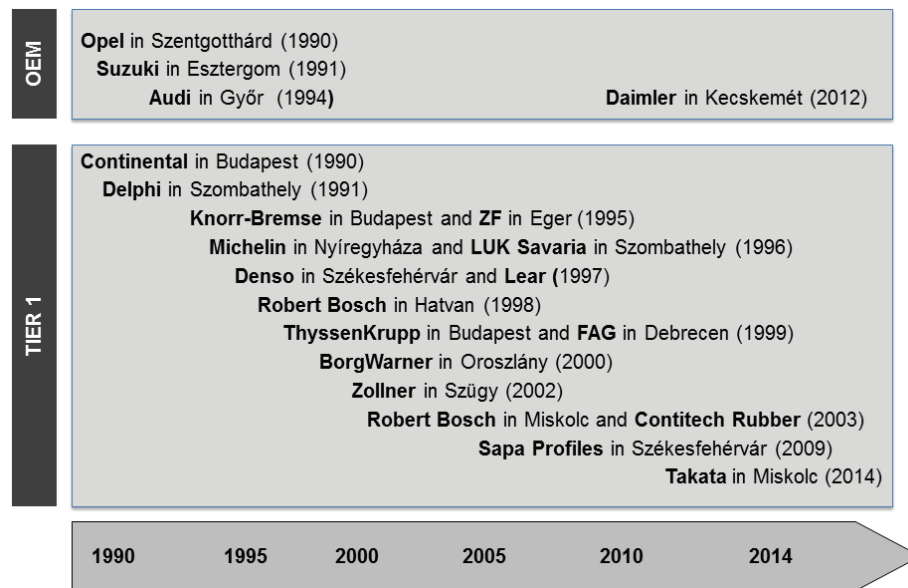
Before entering the examination of the meso-level processes, the understanding of the global, European and national context is of outstanding importance. According to the list of the 500 largest companies globally, two companies in the top 10 belong to automotive industry, Volkswagen (Germany) and Toyota (Japan), ranked 8<sup>th</sup> and 9<sup>th</sup>. There are 4 other sectors in the list, as retail (rank 1); petroleum (rank 2-6); power (rank 7); and commodities (rank 10). The revenue was 261.5 billion USD for Volkswagen and 256.5 billion USD for Toyota based on the fiscal year ended before March 31, 2014 (Fortune, 2014). Another example of global processes is the ASEAN Economic Community (AEC) that is a goal of regional economic integration by 2015 of the Association of Southeast Asian Nations (ASEAN). The key characteristics envisaged in the framework of the cooperation are: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. In short, the AEC will transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital (ASEAN, 2014). An interesting study points out the changing international patterns in foreign direct investments (FDI) in recent days. According to the World Investment Prospects Survey for 2013-2015, transnational cooperations (TNCs) in the manufacturing sector drove a change in preferences on the mode of entry, with almost half of them stating that brownfield

investments and exports would be highly important in 2015. This change in the internationalization patterns underlying the importance of exports and of existing operations will likely result in rationalization of foreign operations and refocusing of businesses.

Regarding Central Europe, manufacturing sector has been radically transformed in the last 15 years following the transition. Internationally competitive, modern and efficient manufacturing facilities have started their operations and the automotive industry is one of the crucial manufacturing sectors in the Czech Republic, Hungary, Romania, Slovakia and Poland. According to a recent report in Central Europe, 114 companies (23%) in the TOP 500 belong to manufacturing sector and deliver an average growth of 2.9 %. Manufacturing holds the third place among all sectors and the main driver of its growth is the automotive sector. The average revenue growth for the sector was 5.8% in 2014, a significant increase from 1.7% in 2012. The biggest moves were the big jump of Mercedes-Benz Manufacturing in Hungary and Ford Romania. Global car manufacturers and their suppliers continue to invest in the CE region as a lower-cost and high-quality base. “The message is clear: this is one of the most important and fast-growing industries in the region.” (Top 500 in CE, 2014).

Hungary is one of the so-called ‘Detroit East’ countries where automotive industry has an outstanding and continuously increasing importance (Edmondson, 2005). From the early 1990s, several OEMs and connected Tier 1 companies have started their operations in the country. As a good example, Bosch Group has established an automotive electronics plant in Hatvan in 1998, a power tool plant in Miskolc in 2001 and a second plant in Miskolc in the automotive sector in 1994. After 2010, several new investment projects were completed by both the OEMs and their Tier 1 and 2 level suppliers in the country. The level of value-added in automotive industry is continuously increasing in Hungary, employing more than 120,000 people and producing 18 billion EUR revenue (2013). More than 92% of the production volume is exported and the industry reached 23% increase in the production value from 2013 to 2014. According to OECD, the Hungarian economy has finally entered into recovery in 2013 and the relative importance of automotive sector, which accounts for 18% of all exports, has increased because of new investments (OECD, 2013).

Narrowing the scope to the subnational level, regional disparities can be observed in the country as before 2000, the Northern Transdanubia Region (Western and Central Transdanubia NUTS II Regions) was overrepresented while after 2008, the Eastern parts (Borsod-Abaúj-Zemplén and Bács-Kiskun County) have become attractive investment locations (Molnár, 2013). The author’s research underlines this observation and it should be emphasized that in the last ten years the presence of automotive industry in Eastern Hungary is strengthening, with a dynamic increase in the number and volume of new location projects (Figure 1). Based on these facts and tendencies, Hungary and automotive industry as territorial and sectoral focus are good examples in the CEE region for the examination of the potential contribution of large companies to sustainable local economic development.

**Figure 1: Industry Settlement of the Largest Automotive OEM and Tier 1 Companies in Hungary**

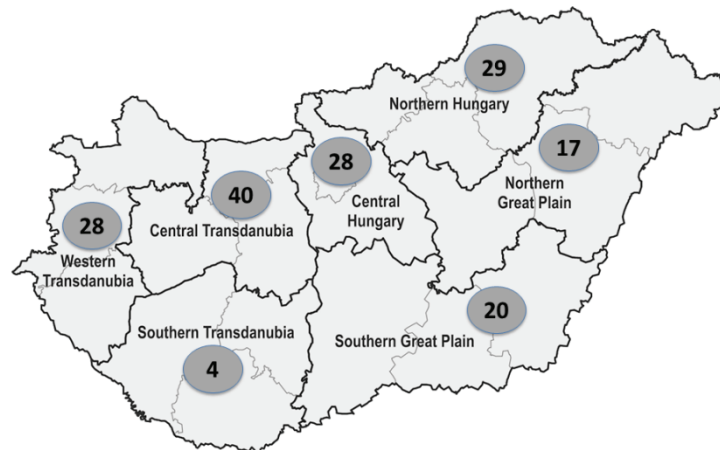
Source: own construction from public data, 2015

### Sectoral Context of the Research

Automotive sector not only brings direct employment and generates wealth but also creates extra wealth and employment in other sectors with a multiplier effect of almost four. Altogether more than 720 companies are working in the automotive sector in Hungary and the industry's share in the GDP is 10%. Regarding the supplier network of OEM and Tier 1 companies in Hungary, there is a clear commitment from the side of large (multinational) companies to increase the proportion of local suppliers in their supplier network. The Hungarian Investment Promotion Agency (HIPA, formerly: HITA 2014) launched a qualified supplier database that has more than 210 registered member companies, mainly SMEs. Large companies as Audi/VW Group, Mercedes, Siemens, Denso, Knorr-Bremse and Continental are also exploiting the database. A representative of BMW has recently called the Hungarian supplier basis an "invisible factory" with almost 10,000 people working in Hungary for the German BMW factory through 54 separate suppliers. The most important, Tier 1 suppliers are Robert Bosch Group, Denso, Knorr-Bremse and Continental. Suppliers can be direct and non-direct suppliers, or productive and non-productive suppliers. The nomenclature changes from company to company. Additionally to direct, product-based suppliers, the author identifies the following areas as cooperation fields: raw materials; transport and logistics; warehousing; public utilities; maintenance and facility management; technological equipment; catering and housing; HR and training; other services including consultancy, design and research and development. The examination of the automotive LQ (location quotient) index strengthens the strong representation and concentration of automotive companies in the Northern Transdanubia Region as

industrial center with three times higher value than the national average (Grósz, 2012). On the other hand, two Eastern Hungarian regions have a continuously increasing data in the last years. In general, it can be stated that the spatial distribution of OEM and supplier companies is not equal as it is illustrated on Figure 2.

**Figure 2: Geographic Concentration of the Biggest Automotive Suppliers in Hungary**



Source: own construction from public data, 2015

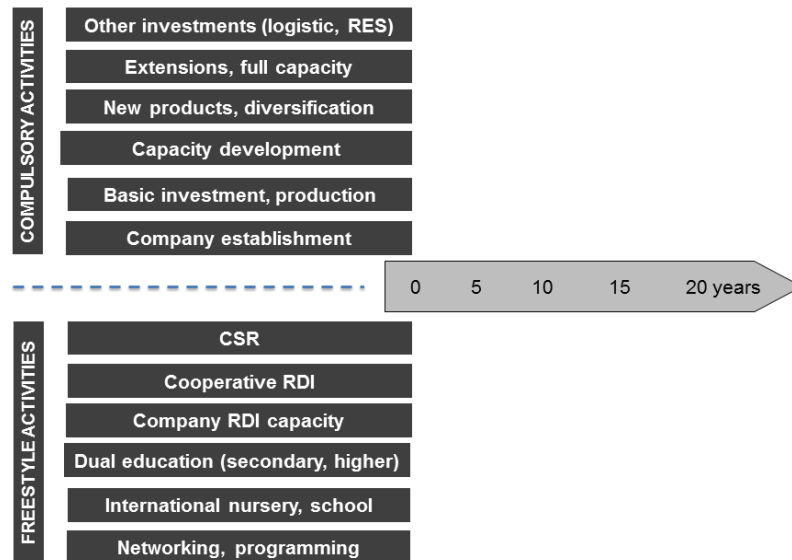
## Results of the Empirical Analysis

According to the author's basic hypothesis, OEMs and Tier 1 companies can contribute significantly to the sustainable development of an area, especially to local economy, through their core (compulsory) and non-core (freestyle) activities. If we assume that local integration is an ongoing process and it can be captured through empirical research, the question is if local integration can be generalized and modelled and if yes, how? The author developed a process-based model with subsequent milestones and with a basic division of the activities into two main groups, the core (compulsory) and non-core (freestyle) activities (Figure 3).

If our aim is to operationalise the helix models, we should first summarize the theoretical background. In case of the triple helix model, the academia-industry-government triangle is examined. The quadruple helix model widens the scope with society as a new dimension, and the quintuple helix model includes the natural environment also. In case of core (compulsory) and non-core (freestyle) activities, a clear connection to the elements of the helix models can be identified. The definition of "core" and "non-core" activities is also important before taking a closer look at the local processes. Business dictionaries generally define core activities as the essential, defining activities of an organisation. These are business functions that are critical and closely related to a firm's strategy, for example production of final goods or services intended for the market/for third parties carried out by the enterprise and yielding income. As additional activities, support business functions or non-core activities can

be defined that are carried out in order to permit or facilitate production of goods or services intended for the market/third parties by the enterprise. Research and development for example is in most cases considered as a support business function.

**Figure 3: Process Model of Local Integration**



Source: own construction from public data, 2015

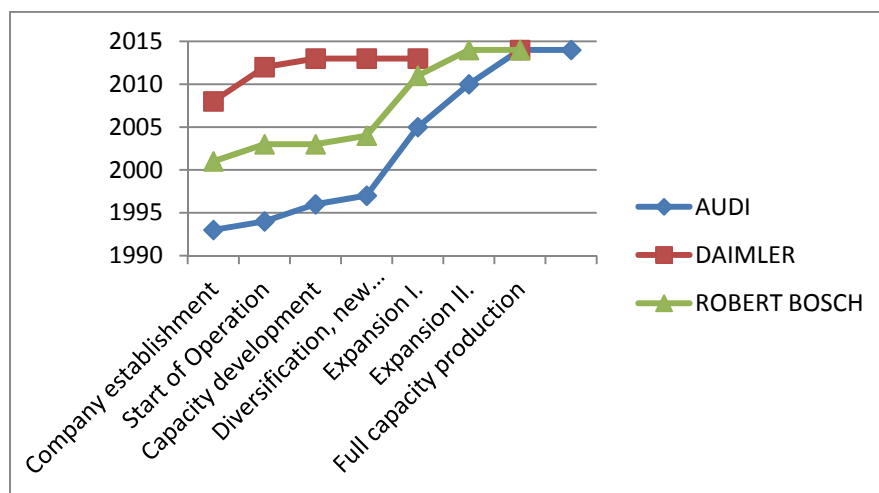
We should differentiate between core activities and core businesses. The literature of outsourcing for example is actively examining recently the shifting emphasis from the outsourcing of parts and components towards strategic outsourcing, where knowledge capabilities can be leveraged through the means of outsourcing (Quinn, 1999). In this article, the author defines core activities as the basic activities directly connected and essential to production. Core activities are normally taking place in every production sites, even in low cost locations. Non-core activities are additional activities, not prerequisites of the production process, such as dual education, research and development and innovation (RDI) capacities and competences, international kindergartens and clustering. These activities do not occur at every production site, but in strategic locations with a potential of a higher value-added.

When selecting the case studies, special emphasis was laid on the different time scale of the companies as the 'early bird' Audi in the 1990ies, the Robert Bosch group in the 2000s and the most recent Daimler starting its operation after 2010. Regarding the core activities the basic construction, the subsequent expansions, the production activities and the continuous technology and capacity development can form the basis of comparison (Figure 4). These activities are conducted in almost all 'low-cost' locations and can form the basis for cooperation with supplier companies, mainly local SMEs. As a specific example, in case of Daimler, there are about 25 suppliers already delivering to the company seated in Hungary. It is important to highlight that during the construction of the new production facility, the ratio of Hungarian companies was 80%. The investment volume was 800 million EUR and the total area exceeds 440

hectares. In the industrial area of Daimler, 10 suppliers can locate in the short term and an additional 35 in the mid-term. As the company forms a production network with the production plant in Rastatt, suppliers can deliver their products directly to Rastatt also. For Audi, the expansions and the new geothermal RES (renewable energy sources) project with an investment volume of almost 27 million EUR are also good examples. The project is executed in cooperation with PannErgy, with Hungarian majority ownership. Audi Hungaria Motor Kft. has almost 100 Hungarian suppliers recently. As regards Robert Bosch group, as Tier 1 level supplier companies, they have a significantly wider regional and local supplier base, due to their situation in the supplier pyramid. They have hundreds of supplier companies in Hungary both directly and indirectly connected to production and the strengthening and widening of local supplier network is a prioritised area in their relocation strategy. If we examine the process in case of the core activities we can observe three main tendencies as (1) the acceleration of the subsequent investment decisions and activities, (2) the continuous and pivotal necessity of a critical mass of hard and soft resources and (3) the increasing importance of greenfield areas and connected logistic infrastructure. As an interesting phenomenon, the use of renewable energies has emerged in one case. There are similar plans in the other two examined cases also, but their realisation is still in question.

As regards the connection to the helix models, the presented core activities are mainly connected to the local economy and local society, while there are some aspects that concern the local and national government and the natural environment.

**Figure 4: Comparison of the Three Case Studies – Compulsory Activities**



Source: own construction from public information and empirical research, 2015

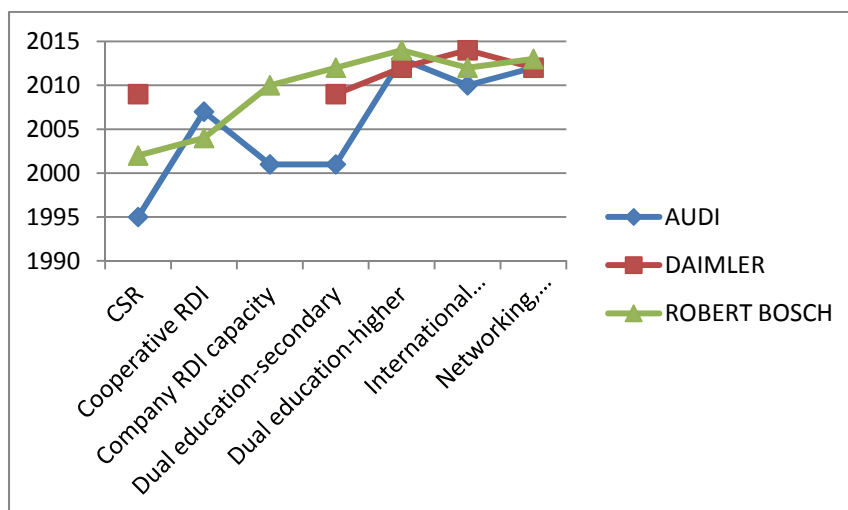
The global economic situation and the dynamics of the market will lead to deep structural changes in the automotive industry, meaning high standards of ecology, safety and comfort. The key factor will be the engineering know-how and this will create the foundations for further development. The establishment of knowledge- and



value-chains are prerequisites of global competitiveness. The non-core activities identified in the current process model contribute significantly to the creation of higher value-added in some strategic locations. Considering the role of local economy, mostly SMEs and suppliers, the strategies and expectations of the OEMs and Tier 1 companies differ from company to company. In some cases, OEMs conduct significant applied research activities and employ a stable and increasing R&D staff additionally to productive workers and administrators, or in their terminus technicus: direct and indirect personnel. OEMs and Tier 1 companies can contribute significantly to the sustainable development of an area, especially to the local economy through their core (compulsory) and non-core (freestyle) activities. As regards the non-core activities, suppliers include service provider companies and other local actors also. The activities presented on Figure 5 contribute to the endogenous development potential of the examined mid-sized cities as joint RDI centres, clustering, dual education and international kindergartens are comparative advantages of a specific area in the global competition. The importance of these “soft” activities has been significantly increased in the recent era following the global economic downturn. From 2010, we can observe a clear priority to dual education at both secondary and higher levels, international kindergartens and schools and strategic programming and clustering activities. Strategic programming activities include cooperation in the elaboration of the Smart Specialisation Strategy (S3) inter alia.

As regards the innovation models, non-core activities are mainly connected to the scientific dimension covering education and RDI also, and to the (local) government and economy, through the establishment of international kindergartens, schools and industrial clusters. Cooperation partners for large companies are the primary and secondary schools, universities, research institutes, governments and authorities, bridge organisations such as chambers of commerce, innovation agencies and cluster management organisations.

**Figure 5: Comparison of the Three Case Studies – Freestyle Activities**



Source: own construction from public information and empirical research, 2015

## Conclusions

As a concluding remark, it can be stated that large companies settled in a specific area and operating on the global market can be strategic allies of local governments and communities and can significantly contribute to the development path designation process. Large companies have started additional activities in the examined meso-level locations compared to “pure” manufacturing that can increase the endogenous development potential of a particular area, for example an international nursery, kindergarten or school, and a dual education centre or a common university department or centre of excellence. These companies are open to cooperation with local actors but the extent to which this potential can be exploited largely depends on the specific local community. There are good practices to be adapted if the decision-makers recognise the importance of local economic development activities. In this case, a wide range of measures can be introduced, and interventions are not narrowed to the construction of new industrial sites for example. On the other hand, several bottlenecks and important barriers can be found in the local economy, more specifically on the supplier level, as the ability to comply with the high level and continuously changing requirements, the inelasticity towards product development, the low level of innovation culture and activities and the low number of suppliers offering complementary services. In order to sustain the positive investment and development tendency in the region, hard infrastructure development is not sufficient any more, more complex interventions should be developed in addition to a critical mass of local resources and a business-friendly local environment. Emphasis should be laid on ‘soft’ factors and the scope of measures could be on dual education and training; life career models; support to housing and commuting and higher quality of life standards.

Large companies should be handled as equal partners in city development actions also and there should be a mind-set change in case of decision-makers and citizens also in order to find areas of mutual interest. This is the key to strategic alliances. In the era of Globalisation 3.0, Industry 4.0 and Open Innovation 2.0, not only companies but also their supplier networks are competing on the global level. Thus, large enterprises can boost the local economy, especially SMEs, as integrator companies. The opportunities for existing and potential supplier companies have widened and increased significantly, though there are some obstacles as the critical mass of resources, long-term availability of skilled workforce in an area and low level innovation potential and openness of SMEs. Support to innovation and investment in education and training throughout the lifecycle are necessary interventions from the policy level.

The limitations of this research are mainly connected to the geographic scope and the number of case studies. Further research questions can be if the identified steps and milestones can be identified in other countries. Is it a general, industry level practice or is it a specific example that occurs in case of particular countries and/or industries. Can the process be generated or accelerated and what kind of interventions and policy level recommendations could be elaborated for the purpose? Is there a difference between domestic and multinational companies with regard to the integration process? Are these positive tendencies sustainable in the long term and what are the next steps in the process?

It can be stated that the examined cases have several similarities and a process model of local integration can be developed on this basis. In most cases, the subsequent steps are the same, while there are also some divergent issues, for example the total absence of RDI activities in case of one OEM company. The process-based qualitative methodology provides a good basis for comparative studies and also for the elaboration of policy interventions. The adaptability of the helix innovation models in local environment was proved and specific actions can be attached to the single elements (dimensions) of the models.

Regarding (re)industrialization and reshoring, the economies of the Detroit East countries constitute a good potential for further industry settlement, whereas the role of mid-size cities should be emphasized. The establishment, location and development of Tier 2 and 3 level companies are achievable targets for national economies and the structure of the supplier network should be further developed and widened with the financial assistance of the European Structural and Investment Funds in the current EU programming period.

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### **1.3. MANAGING INDUSTRY DEVELOPMENT FROM THE PERSPECTIVE OF BUILDING A LOGISTICS SUPPLY CHAIN**

#### **Summary**

The economic development of the country depends on economic development of the regions, which translates into increased pressure on companies from SME sector to raise its economic performance. Focusing on the industry, which dominates in the area, provides the opportunity to invest in it, what can result in improvement of its efficiency. The supporting solution of the local/regional development is the creation of clusters, which in the logistics solutions context provide a strong and organized group, forming a logistic supply chain. This paper presents a proposition for a cluster modelling in logistics perspective and in terms of regional management, also constituting promotion of local branches and the development of micro, small, and medium-sized enterprises in both production and logistics, which are instruments in creation process of the national economy.

**Keywords:** logistics supply chain, clusters, modelling

#### **Introduction**

Local development is seen as a whole of qualitative transformation of structure of the local area, concerning the status of its community life and functioning in its traders (Wojtasiewicz, 2005). The perception of local development in perspective e.g. strategic, creates the possibility to choose a scope that is creating problem, as well as focuses on issues determining the direction and dynamics of development of the territorial units. Entity performing governmental functions in a local development strategy is the basic level of local government (in Poland, function is performed by district or commune), which clarifies established and performs assumed actions. The object, in turn, are environmental needs of inhabitants, treated as a unit of local government, which binds to both potential resources and the economy in the spatial, ecological, social and economic approach (Kot, 2003). The purpose of local development strategies is their development itself, which in its intentions induces beneficial changes. Building competitive advantage is possible in perspective of finding an industry that can be regarded as dominant for the region. On the one hand, economic globalization absorbs its volume of companies in the SME sector and makes them have limited financial resources in its creation. On the other hand, statistics show a significant share of these companies in the creation of national economies. This raises the contradiction of economic signals from the perspective of the economy and the participating entities. Economic aspirations of the European Union assume a

certain unity in this field, hence Polish "market" should seek to unify chosen industrial sectors. The aim of such a consolidation would be to create a few/over a dozen projects that allow one to compete in foreign markets. This solution is possible through the use of resources from the European Fund for the period 2014-2020 arising from the Europe 2020 strategy (more [www.funduszeuropejskie.gov.pl](http://www.funduszeuropejskie.gov.pl)). Objectives of the project relate to investments in enhancing competitiveness and innovation development of the national economy. The project can be positively achieved by assuming the connection of the clusters with the same or related industries and then to build e.g. a logistic supply chain. This will allow to use e.g. raw materials, specialized and skilled workforce or even local capacity to strengthen the regional economy. As a result, different areas of the country could generate strong economic regions that would have the opportunity to compete in, and with foreign markets.

### **Local and regional development - strategic perspective**

Building networks in combining clusters and logistic supply chains requires the determination of a strategy. It is an essential element of the whole process because it is important to define the objectives at all levels of strategic management. The strategic perspective must be also integrated into the area strategy and therefore consistent with the strategy of the region.

The construction process of local development strategies is perceived from the perspective of: vision, an entrepreneurial culture and the spatial order.

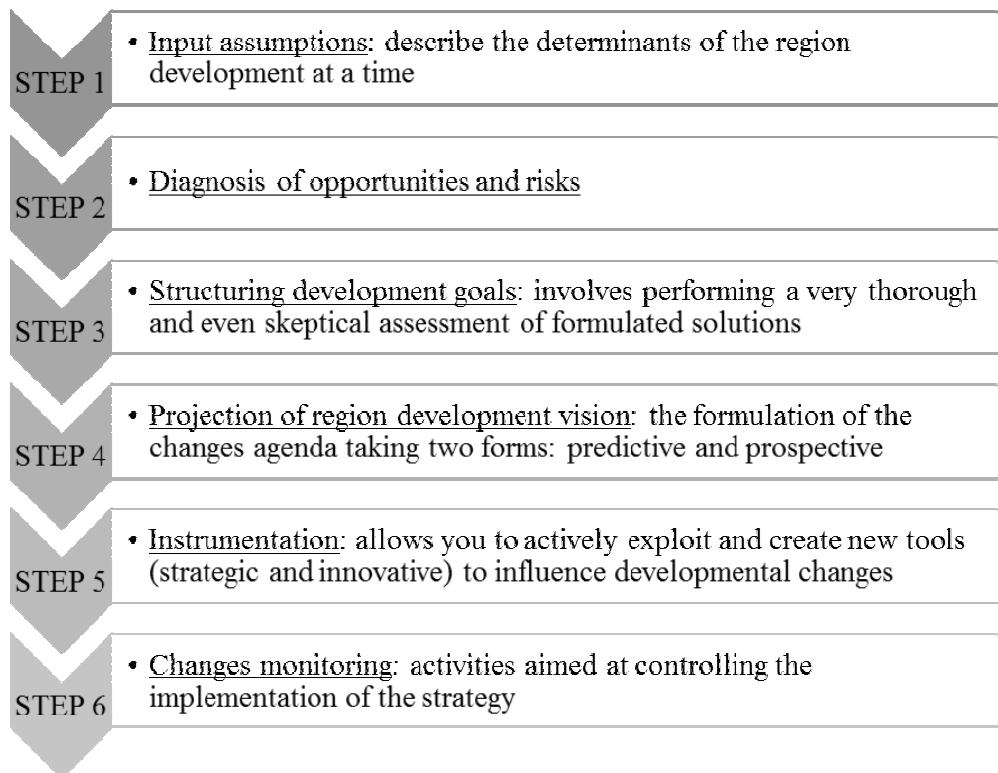
Local development strategy can fulfil several basic functions which include (Strzelecki, 2008):

- *activation function*, starts and activates the team and group thinking on development, conceptual problems, related to the future of the local system;
- *concentration function*, focuses on the most important problems of the local unit from the standpoint of maximum use of municipal resources;
- *orientation function*, depends on the orientation of any local activity following in the direction of implementation adopted strategy, vision and goals;
- *coherence function*, provides opportunities to harmonize, mitigate and eliminate tensions in relations with members of the local community;
- *flexibility function*, allows one to develop skills that apply to present identification and elimination of undesirable factors that may occur in the near future.

Another advantage of building and implementing a local strategy - besides the local development - is its role in positioning, which strengthens the participation of local entrepreneurs in a competitive market. Regional development strategy in the literature is defined as the determinant of social and economic changes. On one hand, the strategy gives the development objectives, on the other, it is an environment (concentration of factors and entities) that holds resources, tools, instruments and mechanisms that implement these goals. Development of the region depends on the directions and actions taken in the process of strategic decisions (Ślusarz, 2006).

Planning is a form of creation of a regional development strategy, which sets out the principles of the regional structure. Its desirability is developing benefits - developing strategic goals - by the strategy entity that simultaneously have its impact on the subject of development strategies. The benefits of the desirability of the strategy come down to principles of regional development policy, as well as activities, resources, procedures, and techniques of strategic planning (Ślusarz, 2006). The process of constructing a regional development strategy has a dimension of decision and time, and involves several steps (Wiatrak, 2006). The six steps of this process are illustrated by Figure 1.

**Figure 1: Process of constructing regional development strategy**



Source: own elaboration based on Wiatrak (2006)

The whole creation process also includes coordination activities, which should be linked with the continuing development activities, taking place in other sectors of the local economy, thus inducing social recognition in the field of strategic regional changes.

### **Cluster mapping process as an element of modeling the dominant industry**

Success in clustering process is dependent on several key elements that exist in the economy. What is important is the appropriate combination thereof in a particular area where the controlled participation and competition bring benefits. Impulses to take certain steps aimed to join the cluster are e.g.: the knowledge transfer, innovation, labour market and employment, market access, competition, entry barriers in the logistic chain, business services, and infrastructure.

Knowledge transfer is one of the main factors leading to the agglomeration of companies; its basic principle is to search for the company's external sources of knowledge whereas proximity resulting from being in the agglomeration significantly facilitates the exchange of knowledge between companies. This rule also applies to relations of companies with universities or research institutes. Geographical concentration of enterprises is partly generated by people, or more precisely by their need for innovation and knowledge management, which have a solid foundation of mutual trust and understanding (Isaksen, 2004).

Innovation is an important element in creating a competitive advantage. The process of its creation depends to a large extent on the knowledge, ideas, and contribution to society as a whole. In this sense, the company's innovation is strongly dependent on its access to external knowledge and to correlate it with the appropriate external entities that possess it. The geographical concentration of the cluster plays an important role in the process of continuous improvement and innovation, creating a close relationship between innovation and competition of enterprises. Companies located close to each other are much more dynamic competitors, looking for innovation, because they are constantly subjected to pressure and comparisons. In addition, universities located around the industry have a better idea of their needs and are able to take appropriate action, in a manner that reflects the vendors who regularly work with R&D department (Porter, 1998).

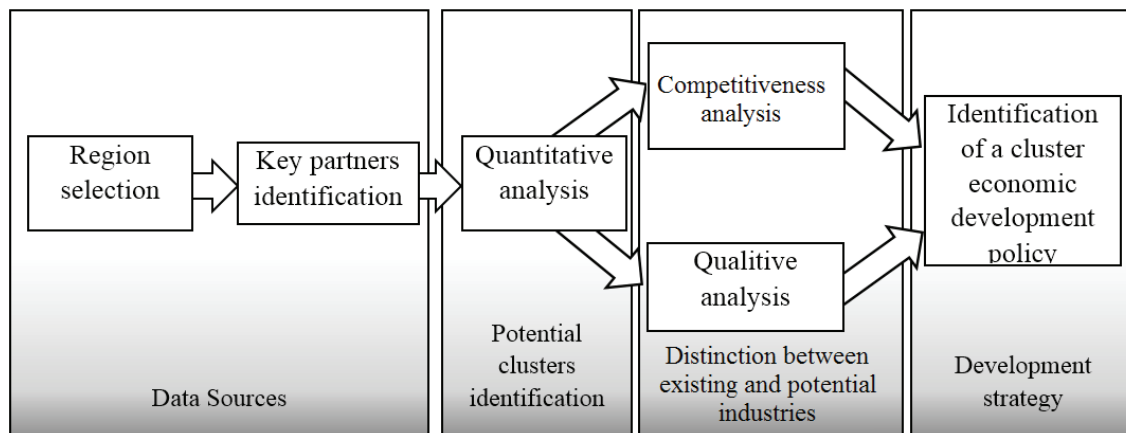
Labour market, increasing specialization between enterprises and the distribution of work in the individual processes can lead to achieve economies of scale, which in turn is a generator in building a competitive advantage in the cluster. This solution seems to be very beneficial for small companies because it allows the operation benefits both for themselves and for large companies. Cluster can start a self-perpetuating growth; then the scale will require the division of labour and expertise cooperating entities, which leads to a specialization of labour market, more technologically advanced product, and demand growth (Sternberg and Litzenberger 2004).

Competition plays a very important role in the activities undertaken within the cluster. Local market and pressures associated with the action on it, affects managers in a motivating way as they try to outdo each other regarding image and reputation (Isaksen, 2004).

Performing the mapping process that is used to verify the validity initiation of cluster initiative, allowing you to handle it in process of modelling the dominant industry (Figure 2.).



**Figure 2: Stages of procedure in the clusters identification**



Source: Skawińska, Zalewski. (2009), p. 189

The subsequent stages presented in the figure above are related in their activities to the following stages:

- Stage I: Region selection - it is used to identify regions which may constitute the reference point for the next cluster initiatives;
- Stage II: key partners identification - involves an examination of entrepreneurs number (in terms of their statistical conditions in a particular area) involved in the clusters merger, as well as institutions and entities that are participants in a building common cluster;
- Stage III: Quantitative analysis - involves performing calculations using i.e. the location factor (e.g. Florence'a), the rank of specialization or location factor, determination of the force concentration entities (e.g. Ellison and Glaeser agglomeration index) and the opportunity to create a cluster based on clustering index;
- Stage IV: Qualitative analysis - is based on a subjective assessment made by the respondents;
- Stage V: Competitiveness analysis - it allows to explore the external environment of a cluster, which will identify the hazards that may interfere with cooperation undertaken within working in networks. They have their source in the projects of other industries or clusters neighbouring with the same profile;
- Step VI: Identification of a cluster economic development - the determination, by the cluster members, of a common mission, policy and activities level that create a cluster strategy. The last step allows one to fasten the entire undertaking in a single project by defining an appropriate strategy. This is the most important part of the whole process of building a dominant industry due to the number of actors and the scale of operations.

Building the domestic industry in conjunction with the logistic supply chain requires clarification of a coherent strategy, which will allow determining the instruments to build a large project.

### **Logistics approach to the dominant industry in the strategic perspective**

Leading business activity in a global environment requires participation in a dynamic and spontaneous process, and it is associated with a flexible “international life” (Luoma, 2006) and the adaptation ability. Transport processes characterized by high consistency, being integrated with each other are crucial for the international and domestic supply chains (Skibińska, 2013). The intensity of the internationalization process does not have a single character, but an important issue in the field of international management. The expansion creates opportunities for determining the rate of growth, but also plays an important role as a tool to improve strategic management in the enterprise. The presence of internationalization, globalization, regionalization, and integration in the socio - political - economic area is largely the effect of functioning of companies and groups of people, where the broad internationalization processes involve different business areas (Becker - Freeman 2006). The choice of strategy depends on evaluation of the competitive relationship between the downward pressure on costs and matching offers to local markets (Godet 2000). Maintaining a competitive advantage on a global scale requires improving the effectiveness through its optimum relationship between global integration and the efficient undertaking of actions, and their local adaptation. The choice of the strategy with the parameters describing the particular market in which the company prospers (Szymczak, 2005).

There are the following four main types of cross-border corporate strategies.

Transnational strategy is the most difficult and the most advanced tactic, which requires both developed resources and skills (Pierścioneek, 2011).

Multinational strategy is a strategy with intensive pressure on matching production and sales to local domestic markets, combined with weak impact on costs in countries where foreign affiliates are located (Olszewska, 2001).

Global strategy implements projects aimed to compete all over the world, where they support large segments of customers with standard needs. There are very low costs at the level of this strategy, as well as an excellent technological standard of the product constituting the foundation of a competitive global enterprise (Romanowska 2004).

International strategy is characterized by a low pressure on the local market adaptation and low costs, so taking this kind of strategy is most often the first step in the internationalization of a company. The strategy has a high degree of centralization operational and strategic decisions (Pierścioneek, 2011).

The choice of a strategy type is dependent on the size of the company and its position in domestic market, but also depends on the opportunities that may affect the development of the company. Companies' strategies in the internationalization process are also largely dependent on logistics, which is a scientific field present in all matters related to aspects of enterprise management (see more Nowakowska-Grunt, 2007) and marketing, that is a component of business ventures.

**Table 1: External conditions and directions of a strategy in terms of logistics**

	<b>Global strategy</b>	<b>International strategy</b>	<b>Multinational strategy</b>	<b>Transnational strategy</b>
<b>Conditions</b>	The same preferences for logistical support in individual markets, equal service opportunities	In a large range similar preferences for logistical support, similar service capabilities	Different preferences for logistical support and / or different service capabilities	Different preferences about the certain elements of logistic services and/or different implementation possibilities of some logistic processes
<b>Direction</b>	Standard (homogeneous) logistic market services, performed globally	Logistic service with a predominance of standard components, realized in a distinct manner on individual markets	Localized, adapted to any market, distinct logistic service	Logistic service realized on the basis for combination of standard and diverse elements

Source: Szymczak (2005), p. 224

Presented in the table above circumstances and trends of logistics in the individual strategies of companies internationalization indicate the place where the course of logistic action can support the process of operational effectiveness. The competence of logistics in the company on the international market may include foreign trade, cooperation with foreign co-operator, or independent international activity (Ciesielski, 2001).

The individual construction elements of the logistic supply chain in terms of the dominant industry should be based on its assumptions on the specific strategy of internationalization. Logistic supply chain should be of global coverage but should exploit the national potential.

## Conclusions

Working on the cluster mapping is a very important procedure from the standpoint of its creation and regional development, while modelling of the dominant industry is an important procedure in terms of its significance for the development of the national economy. Identifying next steps and their precise analysis will allow companies to prepare for the implementation of new solutions.

Building a national economy determines the strength of state in foreign markets. It is very important that the country has at least a few industries that will use their own resources to reduce production costs by government funding of internal operations. The pro-national proceedings in the economic and ecological field will condition the social support. Therefore, the strength of the country will increase stabilizing its position in foreign markets.

Actions pursuing to build projects on a national scale require good preparation and organization; it is necessary to establish some common strategy that will be compatible with the logistics capabilities of the country, also in the field of its infrastructure.

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#### **1.4. THE IMPORTANCE OF SMEs IN LIBYAN TOURISM SECTOR**

##### **Summary**

The Small and Medium Size Enterprises (SMEs) are defined based on the number of employees and the size of the investment. In the tourism sector, SMEs play a crucial role in expanding the nation's tourism industry. SMEs can provide a range of key services and products which are usually not offered by large-scale tourism companies. As such, SMEs are complementary to big businesses and essential in creating a "complete" tourism system. In some of Libya's neighbouring countries, also in many other countries, the tourism has a significant contribution to Gross Domestic Product (GDP) and reduces the high unemployment rate. It is important, therefore, for planners and decision-makers not to ignore this vital sector of the tourism industry. The paper first identifies the role to be played by the state and large investors (private capital) in developing the tourism industry in Libya, and then it examines some essential areas in which SMEs can be key players. The paper will argue that SMEs might be more successful in these particular areas of the tourism industry than big businesses. It will also identify the role the state can play in supporting and upholding SMEs – for example, adopting business-friendly legislation or promoting and enforcing internationally recognized standards and procedures in the tourism sector. Lastly, the paper will look at the socio-economic and political benefits that the state can achieve from doing so, in particular trust in leadership and sustainable political stability, which is much needed in this part of the world. Throughout the paper, frequent reference will be made to lessons to be learned from the successes and failures of developing and transitioning nations in this sector.

**Keywords:** Libya, GDP, tourism; SMEs; unemployment

##### **Introduction**

Tourism is one of most rapidly growing sectors in the world. International tourist arrivals (overnight visitors) grew by 5% in 2013, reaching a record 1.087 million. Total export earnings generated by international tourism in 2014 reached USD 1.5 trillion. Europe, participates with 41% of all international tourism receipts and the increase was 17 billion USD, the second was Asia and the Pacific was the second with 30% share and with 16 billion USD increase, Americas had 22% share and 10 billion USD increase, the Middle East had 4% share and 4 billion increased and finally Africa comes with 3% share and 1 billion increase. Total employment in this sector was over quarter billion. Secretary General of United Nations World Tourism Organization (UNWTO) said; "The tourism sector has shown a remarkable capacity to adjust to the

changing market conditions, fuelling growth and job creation around the world, despite the lingering economic and geopolitical challenges. Indeed, tourism has been among the few sectors generating positive news for many economies (Hani Abdullah Ali, 2013; UNWTO – World Tourism Barometer; WTTC & UNWTO)”. Mediterranean is the leading touristic destination in the world and has the highest growth-rate. More than 50% of total 46 000 km coastline is urbanized – in Libya, this proportion is very-different in favour of natural coastline. Tourism in Mediterranean countries as total has above 10% contribution to GDP. It’s worth to mention that tourism’ total contribution to GDP (with additional services, etc.) is quite three times higher than the direct contribution (European Union, 2012).

Since there is no statistical data collection in Libya, so there is no data about the internal and domestic tourism. Although the security situation is in the country in critical condition now, but looking back on happy times, when local people were eager to travel inside the country firstly for business reason and also with family for holiday, that suggests the inner tourism was intense once. Since Libyans have never suffered so strict bans as in the neighbouring countries, Libyans used to travel to Europe without serious restriction. Therefore, many Libyans became familiar with the Western standards in tourism, in restaurants, cafes etc., and now they are missing these standards in their home country. International tourism was nicely developing before the revolution. Data is available until 2006 but anybody can confirm the more open became a country the more tourists arrived in.

Cruise ships started to bring continuously big number of visitors to Tripoli and many small service companies were immediately developed (tour operators, guides, restaurants, craft-men workshops, etc.). Moreover, it coincided with the policy which had already started a little bit before and had allowed the revival of some elements of the private sector.

The SME is the core of tourism success in any country in the world, that the provision of proper tourist image of the country acquired tourist details such as food, souvenirs, clothing, decorations and handcrafts, and this dose work institutions always by SMEs. In many countries like Libya, tourism has a good potential to contribute to GDP and economic growth. In case of Libya, it can offer a diversification for national economy which is now based on the hydrocarbon sector in 85%. Tourism can provide work opportunities for unemployed especially in that places where this type of options are limited. And it provides also entrepreneurial options for those who are ready to jump into the business. In Libya the development of tourism will definitely get involved the construction sector and investment in fixed assets cannot be removed from the country. In many countries, money generated from tourism can be used to improve the local infrastructure, but this is not the case in Libya, which has significant earnings from oil and gas and the state has enough financial opportunities to invest in this sector. But two questions are immediately emerging: one is the rational development strategy which can determine the – usually infrastructural – projects needed for attracting clients, and the other is the effective usage of the invested money without the serious influence of corruption. In many developing countries like Libya, the lack of appropriate infrastructure is a major problem. Also in many countries, there is the request to diversification of tourism market. Many tourism market segments cannot



immediately be targeted unless the requisition and of course the conditions for these kinds of market segments can be offered. As a result, the revenue can be generated from a specific market segments and the profit could be invested in tourism related services to target more market segments gradually. Therefore, the return can improve the general tourism sector.

### **The concept of SMEs**

The need to define the SMEs in European Union (EU) emerged already in the 80s because some subsidies are restricted to this category inside the Union. It means this definition got international relevance although not overall. In 1992, the Commission had proposed limiting the proliferation of definitions of SMEs in use at Community level because existence of different definitions at Community level and at national level could create inconsistencies. Following the logic of a single market without internal frontiers, the treatment of enterprises should be based on a set of common rules. The updated definition of different types of SMEs is based on EU recommendation No. 2003/361/EC in Article 2 is defined the categories by staff headcount and financial ceilings, which are as the follows (EC, 2003):

- The category of micro, SMEs is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.
- Within the SME category, a small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million.
- Within the SME category, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million.

The ceilings are used for individual firms only. If the company is part of larger grouping employee/turnover/balance, sheet data from that grouping should be included into consideration. The developing countries differ in the SME definition, which makes it difficult to make a comparison between the two groups. For example, a medium size projects in developing countries can be small in comparison to in developed countries and large-scale projects in developing countries are the medium sized ones in the developed world.

The International Labour Organization (ILO) definition follows the EU definition using only one element: the number of employees.

In Libya, the SMEs definition by the Ministry of Labour, Training and Employment under Article No. 321 in 2004 as follows: “Is a civil institutions productivity and service, and a tool for economic and social development to accommodate the younger powers, and are available where appropriate for the efficient operation of technical, administrative and technical specifications, and the number of workers microenterprise more than 25 element, and the lending value beyond any seed capital, which gives the institution of this size 2.5 million maximum, the medium is not the number of

employees by more than the number 50 element, but not exceeding lending for seed capital value 5 million dinars maximum (Libyan Ministry of Labour, 2004).”

Why SMEs are important? In order to give adequate answer we should be familiar with the economic and social situation in Libya, which is quite similar to other Middle East and North Africa (MENA) countries in some aspects. A useful guide for such a summary can be based on fresh report of World Bank (World Bank Report, 2015). The report describes the MENA countries as a success story until late 2000s: economic growth rate was at average 4-5%, poverty rate was declining, completed primary school was at almost 100% in the related population, and there was a growing enrolment in higher-level education (secondary and tertiary education). In tertiary education, there was a high percent of women. In infant mortality rate, MENA had the fastest decline in the world. The Gini coefficient (inequality) was lower than in other countries and it was shrinking.

The development model in these countries called “social contract” or “authoritarian bargain”. Although the social contract was working successfully for a longer period with results from both economic and social aspects, it probably achieved its limits. “Perhaps the clearest signs that the social contract was not delivering were the Arab Spring.” The extension of public sector was financially no more manageable, and the private sector did not provide enough jobs especially for younger generation entering to the labour market because the private sector was too slowly growing. Unemployment rates were growing rapidly even among the educated young people. In employing people, the informal way started to dominate more and more, and it was also mostly dominated by men. For women became more and more difficult to entering to the job market. “MENA today has the lowest female labour force participation in the world” although the relevant part of younger generation has a high level of education and especially the women were those who dominated in universities and colleges. One of the consequences is that incremental reforms in one area may not dislodge the system, i.e. improving education quality without increasing job creation, the situation remains stuck. Young firms and start-ups - all are SMEs – can create most of the jobs.

However, the problem in these countries is twofold. Firstly, the number of creation young firms is low. MENA has one of the lowest rates of new firms appearing in the market. And it is also interesting, that few firms die to make space for the newcomers. A general opinion is that the median age of firms is the highest in the developing world in the MENA countries. What is the reason that there are only few young firms and why are they not or fast enough growing? Based on survey of enterprises there are different reasons such as: macroeconomic and regulatory uncertainty, political instability, and corruption. Governments are needed to reflect on it and to introduce a policy which will support the SME sector (Keller, n. d.). However, one thing should be always very clear: the most important key element is the macroeconomic and political stability, and this should be the highest priority. Instability stops the inflow of foreign investment to manufacturing and services, which also could create jobs and transfer technology important for the SME sector as well.

As mentioned above the public sector cannot absorb more job seekers and what is more in the public sector serious cuts are happening. In addition, this is very

challenging because the growing income of the population for many years was the result of the extension of the public sector. Nevertheless, the population must realize that public sector can no longer be the main employer. Beside the over swelled public sector the other costly system is the massive subsidies of energy, water, food, medicine, etc. which have in many cases led to deterioration in services (blackouts, etc.) and also resulted in low agricultural productivity. Cutting these subsidies will surely raise strong opposition but without cuttings, the budgets cannot be managed even in short-term (World Bank Report, 2015).

As we could see, the importance of SMEs generally comes from their contribution to the national economy and social development. Many SMEs provide labour-intensive job. They employ large number of workforces and also low skilled ones, with low education. Incomes at SMEs are more equally distributed at larger companies, and since SMEs provide salaries that are more reasonable they contribute directly to the alleviation of poverty. SMEs can stimulate the efficiency of allocation of resources in developing countries, and they are ready to use labour-intensive production methods since cheap labour-force is available in big amount in the developing countries but the access to capital is difficult and very limited.

Unfortunately, in many cases the profit, derivate from the competitive prices of SMEs and from their flexibility, does not stay at the small players, but enlarge the profit of the bigger players. SMEs quickly achieve profits unlike the major projects that require many years to achieve a net profit after years of huge capital investment. However, it is worth to mention that large companies have more financial means to minimize the risks in the business process. SMEs are usually local players. It means they do not move so easily to another country. It can be a handicap as well because SMEs have no big lobby force like the big or multinational companies. The government can easier “blackmail” the small players but it is very cautious with the large ones. Therefore is important in Libya (and in other Arabic countries) the Islamic banking which has strong social background and which considers the correct profit. In technology, Human Resource Management (HRM), business and managerial skills the large corporations have definitely advantages.

### **SMEs in Tourism Sector**

SMEs in tourism sector are dominating in many areas. And only few cases are dominated by larger enterprises like hotel chains or bigger hotels, tour operators, airlines, international Public Relations (PR) agencies, etc. The need for services of SMEs depends on the number of arrivals which had an upward until 2000s from the 90s. The following Table 1 shows that there are setbacks the growth is not steady. These setbacks can be connected to sensitive events mostly related to security problem. In 1990, Tunisia accepted about 30% more visitors than Egypt but since 2000, the opposite happened. Libya was lagging behind its two neighbours but had a steady growth until 2011. The revolution of course interrupted this process and since then we are waiting for the better circumstances, for the improvement of security (Keller, n. d.).

**Table 1: International tourist arrivals (in thousands)**

Countries	1990	1995	2000	2005	2009	2010	2011	2012
Egypt	2411	2871	5506	8608	11914	14051	9497	11200
Libya	96	56	174	170	260	271	26	104
Tunisia	3204	4120	5244	6975	6904	6902	4782	5950

Source: UNWTO Barometer

It is interesting to observe how big the difference between Egypt and Tunisia in foreign tourists' expenditure is. Between 1990 and 2000, it was about the double sized but after became three-four or five times as much in Egypt than in Tunisia. It shows very clearly how much important is the image and the brand of the country.

In case of Libya, we can observe much more modest numbers and the setback caused by the revolution was more drastic – number of tourists in Libya dropped to one-tenth - than in the other two neighbouring countries, where the number of tourists fell only by two-thirds. However, Libya has never really had emphasized the country as a tourist destination and the income generated by tourism was not important for the state in the past. Only when the need for a new economic policy appeared to have a diversification of the economic activity of the country in order to create a less vulnerable economy which is not only based on the revenues from the hydrocarbon sector. This idea has unanimously been welcome by the political and business elite after the revolution.

We can observe significant differences between the three MENA countries not only in the number of visitors but also in their per capita expenditures. The expenditure in Egypt is constantly higher with 2.5-3 times than in Tunisia (Table 2). In Libya the data is close to the Tunisian ones except 2011 when the number of visitors dropped less than one tenth but the spending soared by 17 times. Visitors during the revolution were staying longer than regular tourists and were ready to pay higher in a risky situation.

**Table 2: Expenditures by international visitors (\$/capita)**

Countries	1990	1995	2000	2005	2009	2010	2011
Egypt	1090	1354	846	1055	778	872	917
Libya	208	179	460	235	346	221	3846
Tunisia	350	366	377	338	392	383	377

Source: UNWTO Barometer

### The Economic Role of SMEs

We try to summarize the economic role of SMEs concerning economic development. SMEs are often called as the driving force of the national economy (Illés et al, 2015). First of all, SMEs in numbers are absolutely dominating in production and services, but their influence on economic policy can vary in a large scale (Morvay Karakas and Tatár, 2015).

In EU's policy, they have a delicate position but it is truth in some member states only theoretically. In MENA countries where are no serious large industry the economy is practically based upon the smaller and micro players which provide a serious contribution to GDP.

In Libya, it is different because 75-85% of the country's GDP is coming from the oil sector and the estimated number of smaller players is not as high as in Egypt or Tunisia. The fact is that exact data concerning SMEs are missing. Beside their contribution to GDP, the other economic advantages of SMEs are the followings:

- ② The need for capital in order to establish SMEs is low in comparison to larger scale businesses. Most of the SMEs do not need expensive sophisticated technology. The famous type of SME is in garage-started big names in the US. The limited size of capital accumulation can ensures that higher number of SMEs can start and natural selection mechanism will reward the better ones who can survive the competition. They might have a chance to grow further.
- ② The starting capital can be the family saving and the starter should not fight with banks in order to get loan but can rely on individual savings. The needed capital/savings can be in a flexible relationship with consumption.
- ② SMEs can better maximize the use and exploitation of raw materials available locally for the production, and such flexibility can be used to meet the taste of the consumers in goods or services.
- ② SMEs used to be the players in craft-work that could help keeping the local/domestic culture but nowadays Chinese products are more and more inflowing to the market. Today many products representing the folklore in a country are produced in China. This is bad not only because destroying the cultural identity of destination countries but diminishing the work option for locals.
- ② Local productions/services to/in local markets produced by SMEs can better meet the financial capability of the residents especially in developing countries. Through local production the import exposure is less and so hard currency expenditure of the country is reduced. The need for local taste is anchored very much in the society therefore, food industry plays always-important participant in domestic industry.
- ② SMEs can contribute to export significantly either in a direct way or as suppliers of large companies. In many production supply chain is managed by smaller players although the majority of profit and the brand belong the big or multinational corporations.
- ② In reflecting to market changes quickly, SMEs have advantage. The daily routine is more common at large corporations. At a small player, the flow of information and the process of decision making is logically much faster than at bigger ones.
- ② Openness to innovation is key element to success and SMEs can more easily verify the need or the feedback of the market.

Important economic functions can be fulfilled by SMEs like changing the industrial structure of the country, contributing to the economic infrastructure, representing the private ownership in spite of collectivist attitude, and enforcing the legislation toward creating more business-friendly environment (Illés et al, 2012).

If we look at the tourism in some MENA countries at first glance, we can see the very high expenditure of international visitors (domestic tourism is limited). The gap between Egypt and Tunisia is growing and it is almost 4 times bigger in favour of Egypt (Table 3). In Libya, the total sum is trifling if we consider the very similar (theoretical) tourist potential in Libya.

**Table 3: Expenditure by international visitors (\$ billion)**

<b>Countries</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Egypt	2.629	3.888	4.657	9.081	9.272	12.258	8.707
Libya	0.02	0.01	0.08	0.04	0.09	0.06	0.1
Tunisia	1.122	1.507	1.977	2.361	2.704	2.645	1.805

Source: UNWTO Barometer

The above mentioned expenditure provides a significant contribution of tourism to GDP in both countries, and of course it's very low in Libya.

### **The Social Role of SMEs**

High employment rate is priority interest of state anywhere. If it achieved the state, burden on social expenditures would be smaller and the social tensions limited. Therefore, the role of SMEs in the social development is huge as they employ the majority of workforce. Creating jobs in SMEs has lower cost than in big corporate. Since the selection process of employees in small firms are less mechanical, less rigid, the required qualification can be considered more flexibly in SMEs. Tourism has high potential to increase the employment (European Union, 2012).

Unemployment rate can be defined by either the national definition, the ILO harmonized definition, or the Organisation for Economic Co-operation and Development (OECD) harmonized definition. The OECD harmonized unemployment rate gives the number of unemployed persons as a percentage of the labour force (the total number of people employed plus unemployed). [OECD Main Economic Indicators, OECD, monthly] As defined by the ILO, “unemployed workers” are those who are currently not working but are willing and able to work for pay, currently available to work, and have actively searched for work (ILO).

Absorption of unemployment is one of the biggest challenges both in the industrialized world and in developing countries. In the first group the speeding-up process of automation, the high salaries and the outsourcing of production are the main barriers, in the second group the lack of skilled and educated workforce. In MENA countries the high unemployment rate are contributing to the growing level of political and social insecurity.

In Libya, the government tried to integrate the members of militias either to the newly created law enforcement units or give them the help to become entrepreneur or to study at home or abroad. This intention could not be realized because of the lack of consensual support of the leader class. But this task should be done earlier or later.

Without it, there is no option to govern the country peacefully. Since Libya has large potential to develop different branches of industry and services in the country, the prospect for Libya is definitely brighter than for example in Egypt where slowly one hundred million people are eager to find its place on the labour market.

Unemployment rate is especially high in two cohorts: one is the fresh graduated who has no experience yet and the other is the elderly above 50 or more. In Europe in some countries the unemployment rate of youth reached 50% or close to it. Also in Arabic countries where is not enough – foreign or domestic – investment in production or service sector the unemployment of youth is a threatening danger even now, especially if we consider the traditional big number of children in families. The unemployment rate in Libya shows more or less standard level, at 19-20% as shown in Table 4 (European Commission, 2003).

**Table 4: Unemployment rate in Libya, 2003-2013**

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
20.0	19.9	19.8	19.6	19.4	19.1	18.9	18.8	18.2	19.6	19.6

Source: KNOEMA World Data Atlas

The Libyan government has had the intention as a priority to develop and stimulate the touristic sector and agriculture. These two can absorb the biggest number of workforce and without big investment in education, especially in agriculture. If we look at the Egyptian or Tunisian data, Libya has about 10% growth potential (Table 5). In a country where the majority of employees work in the public sector, this would be a very serious push to reduce the unemployment rate.

**Table 5: Employment in the tourism sector (as a share of total employment – direct, indirect and induced employment, %)**

Countries	1990	1995	2000	2005	2010	2011	2012
Egypt	7.4	8.6	9.6	13.0	15.4	13.1	12.6
Libya	5.7	8.7	...	...	3.2	3.0	2.5
Tunisia	15.3	16.3	17.2	16.5	16.1	12.8	13.0

Source: World Travel & Tourism Council (WTTC) & UNWTO; “...” not available

The role of the state is to aim “at promoting small businesses and medium there is a need for skipping SMEs under the guidance part of the economic resources for their development and develop and make projects productive. Most states have become focused on the provision of material support and service for these projects, especially in the field of counselling and guidance and training, it’s time to enjoy these projects as large projects have received support and care (Uomaymah, 2006)”.

## Challenges for SMEs

Although the impact of SMEs on national economy is heavy, they are facing many problems and challenges. These problems are related to the general or local business environment, the regulatory framework, taxation (Illés et al., 2011), the general infrastructure provided by the state or the community, etc. It can be called policy-related problems or challenges (Keller, n. d.). The main reason of these problems is when the state/community does not realize the importance of SMEs and help functioning effectively. For example, the educational system is under state control and can provide remarkable help for SMEs in recruiting workforce. The quality of employees and their creativity, readiness for innovation is paramount in the modern economy and not only in high-tech sector anymore.

Of course, the acceptance of such attitude of employees is necessary, without the openness of the company any creativity could work. Education for tourism sector has two legs. One is the request for skilled workers and the other is the need for good leaders, managers (Hurta and Dunay, 2013). Both types of schools are now available outside Libya but already in the neighbouring two countries, which have had large experience in tourism. Starting vocational and technical education for tourism sector could be profitable in the country but the students might probably be foreigners and not Libyans. Like now is the situation in the functioning hotels where the staff consists of foreigners, mostly from Egypt and Tunisia and only the management is Libyan.

Financial matters or funding use to be a serious obstacle for SMEs, The difficulty begins when the company without any records from the past is requesting finance based on its business idea and business plan. In the beginning, risk is naturally higher than during the operation. Therefore is praxis introduced to bear the risk-by-risk or seed capital, or turn to state funds who can take even the loss with the philosophy of economy: if hundred companies are starting maybe, the half will survive and maybe ten will really be successful?

The lack of basic managerial skills and knowledge (export-import management, logistic, legal or technical knowledge, HRM, etc.) need some kind of institutionalized help usually managed by state or local community or chamber or professional platform. The vocational training schools and other education forms are often criticized by business sector why the “products” of the education cannot meet the requirement of business side neither in specific professions nor in quality.

SMEs in Libya are facing the following obstacles although some of them are not Libyan-specific (Haitam, 2013):

- The main question is usually financing; how flexible is it, how much available, how big is the bureaucratic burden, etc. In Libya the Islamic banking is coming up and as we could see during the last world-wide economic crises this type of banking system was more resistant to the crises. Its logic, sharing the risk and profit helps both sides – lessee and lesser.
- There is poor infrastructure especially for SMEs, and especially in the areas of Information Communication and Technology (ICT), marketing and export.
- Lack of attention to special need of SMEs during regulatory work.



- No reliable statistical database concerning the economic sector and no survey about SMEs.
- Lack of cooperation between the companies based on pure business interest especially between big and small players.
- No case studies about success stories of SMEs.

In Libyan tourism sector additional difficulties can be defined as (Haitam, 2013):

- Tourism sector is underdeveloped now except some four and five star hotels.
- Lack of resorts for leisure time, entertainment facilities, enough good restaurants, beaches for foreigners, tourist packages, available information materials, international marketing, English inscriptions, abandoned touristic sites, etc.
- Lack of comprehensive and integrated policy and planning concerning the development of tourism. The heavy bureaucracy and corruption is the heritage of the past and can be changed by consensus of the political players. Libya can follow the way of modernization of some traditional Arab countries/societies and it can use state-of-art solutions in ICT and with the help of ICT in many segments of tourism, especially in marketing. Quality control should be improved overall.
- No community acceptance of and interest in development of tourism. Libya is a conservative and rich oil-country therefore not all type of tourism is welcome in the country (party tourism is definitely not). Formal or informal behavioural requests can provide a burden.
- The tourism sector susceptible to political and climatic conditions, therefore tourism can be very quickly affected by political disputes and the climate changes as well. The environmental awareness in Libya is very low, but it is good news that civil society is very active and progressive in many fields. Climate change can hit Libya if the general warming will raise the temperature in the country, which already registered the peak warmth.

### **SWOT Analysis of SMEs in Libyan Tourism**

In the following we summarize the mentioned touristic potentials and their barriers. Weighting the points we are very much concerned that security will bring prosperity in the country. Security and democracy should work together in order to fulfil the general wish of Libyan people: to live in independent, socially satisfied, well organized and well managed, economically successful and well-respected, highly estimated country.

#### *Strengths:*

- Part of Mediterranean culture
- Beautiful nature (1900 km cost-line, untouched deserts, unique desert and oasis cultures, natural attractions
- Many archaic, historic and cultural heritages of more than ten thousand years
- Five cites on UNESCO World Heritage list
- Government's policy is for diversification of the economy – one priority can definitely be tourism sector
- Close to Europe, close to the potential market

- Very good road, sea-port and airport infrastructure in the whole country linking the cities and smaller settlements
- English is widely spoken
- Strong influence of Italian tradition in food

*Weaknesses:*

- Most focus on oil
- Not enough managerial knowledge
- Lack of tourism infrastructure
- Lack of quality accommodation
- Bureaucratic barriers for FDI,
- No detailed tourism strategy of state and no regulatory frameworks
- Lack of managerial knowledge/skills
- No well-trained human resource in tourism sector
- Still bad international image of Libya
- Few information about Libyan tourism opportunities
- Public utilities are not working continuously and properly
- Very few SMEs in the country and especially in tourism sector

*Opportunities*

- Conservation, maintenance and development of cultural, historical and natural attractions
- Investments in tourism infrastructure, attracting FDI into the sector
- SMEs can be supplier of/partners in bigger tourism projects
- Diversification of tourism products
- Libya mediates (Egypt and Tunisia) with applicants in the SMEs in the field of tourism
- Increased marketing and creation of a brand that identifies Libya

*Threats*

- Lack of enough security and deterioration of security situation
- Big competition by neighbouring countries and by other Mediterranean countries which profits from tourism (Egypt, Tunisia, Turkey, Greece, etc.)
- Political instability at this time
- Not enough skilled labour in the industry

## **Conclusions and recommendations**

The potential for tourism in Libya is huge. Location of the country is excellent so it can attract many tourists. The image of the country must be changed; the traces of the past must be eliminated with effective marketing activity (Font and Ahjem, 1999; Kotler, 1994), the re-established security could raise growing interest for Libya as a tourist destination.

Although the country has a well-educated workforce, in low-level services mostly foreigners would work. These foreign workers definitely have to be trained properly in

order to meet the Western standards. In Libya, there is a policy that Libyans are controlling key managerial positions. Many Libyans graduated at good European business schools, i.e. they do work in highly professional financial manner. Libyans are eager to start business; the entrepreneurial dynamism is high in Libyan people; the state is reach enough to provide the necessary infrastructure, particularly the very much-needed renewal of Information Technology (IT) infrastructure, which can boost many IT based developments fulfilling the request of the modern age.

We already mentioned the security as the most important issue. Supposing the peaceful status of the country two elements should particularly be considered: securing the borders of the country and balancing between local values and demands of tourists.

In Libya, starting a business is not difficult for local residents. The different regulations, taxation, etc. are loose. If Libyans will taste the success in business, and will see the first results of the developing tourism, the country can seriously rely on the tourism sector as well, and the SMEs could create prosperous life and initiate attractive climate in the country.

One part of recommendations is reflecting on the SMEs sector in general, and suggests a comprehensive and supportive policy toward SMEs. This policy should be continuously revised and developed using good examples from other countries, and finding new directions for touristic services (Lehota et al., 2015; Tatár et al., 2014). One of the EU economic priorities is the development of the SMEs sector in the Union. Reducing the unemployment in EU is widely considered by the activity of SMEs. And also competitiveness can largely depend of the very flexible and innovative smaller enterprises. The other part of recommendations is dealing with the specific problem of tourism sector focusing on SMEs' problems acting in this area.

Unemployment is probably the biggest social problem in currant Europe, especially among young people. If SMEs start to provide job opportunities for young people, they can be much more integrated into the society. They can feel themselves as active and useful member of the society, they can consider themselves as shareholder in social development, and therefore they would be interested in maintaining the social stability and security.

Establishing a small company a key issue uses to be the financial ability of the entrepreneur in the beginning. Support of financing the SMEs in the beginning, beside the spared money of family, is usually the task of the state or the local/regional government or both. This finance cannot be based on the market conditions for hundred percent. The best solution can be the risk-sharing policy which leaves enough playgrounds for the entrepreneur in the first phase. Of course, it needs the revelation of the state sector what is the economic and social importance of SMEs and what is its role in the general economic policy. The risk-sharing policy of the state can ease the commercial banks to keep pace with the demand of SEMs sector and not only the large companies' one.

Integration is a key word of our time which is more or less connected to the younger generation. Competition between cultures or nations or countries can be interpreted as an engine of the global development. But it should always be considered that such a competition to be based upon encouraging the spirit of creativity, innovation and invention. The cultural building begins to educate young people and prepare them to

be integrated and well-balanced in order to be able to give answers to the challenges of the civilization. This is why SMEs play more important social role than providing jobs. SMEs can provide a space for creation/creativity and for freedom as well.

Given the economic importance of SMEs and their role in the economic development process, it is necessary to increase their effectiveness. So the smaller and bigger players of the economy could cooperate with each other.

In Libya, the situation of SMEs is special like in some other rich Arab countries. In this wealthy state the entrepreneurial intention of people is aimed less at earning money, creating profit because the country can provide for the majority of the citizens a certain level of wealth. But it is aimed at entrepreneurship because Libyans enjoy the business issues at all. It is like a player who enjoys the game itself, but of course wants to win as well.

Since in Libya the integration of youth is key element on the way towards the security the SMEs can function as “integrator”. In Libya, the unemployment rate among young is high. Out of this type of existence, there are three ways: military and other law enforcement services, studying and business field. All of the three needs the subsidy of state but in business case the commercial banking system and especially the Islamic banking can provide significant help. Such an entrepreneurial activity can help in diversification of the Libyan one-leg economy. We think the large scale of supportive model for SMEs are already worked out and the real question is how the state can effectively manage such programs and how it can keep away the corruption.

In tourism sector Libya has large potential as we could already see it in the past, and the country has the financial ability as well to develop this sector (Akram, 2010; UNWTO, 2000). Parts of the necessary infrastructure are ready or needs refurbishment and the rest should be developed. The question is how much role should play the state and state institutions and how much should be managed by the private sector. Public opinion in Libya might be right now that the big and key projects should be managed and owned by the state and the private initiatives can join the big ones and can build up a partnership with them. The Libyan state owns different investment wealth funds and these funds are key players in the domestic business life. They are more business-oriented than traditional state institutions and their profit-orientation and professionalism can stimulate the smaller local players.

A comprehensive tourism strategy is surely needed which defines the task of the state, the required infrastructure developments, manpower, policy or regulatory changes and of course the PR and marketing activities (Font and Ahjem, 1999; Kotler, 1994). Libya's potential in this field is as much as in the two neighbouring tourist destination countries or even higher. But the country should counterbalance the bad image of the past and also of the recent instability. Image of the country as tourist destination highly determines the decision of potential consumers and also makes segmentation among them. The new image of Libya should focus on the cultural heritage, the natural beauties, the chequered, picturesque and diverse local culture; and the archaeological monuments of the country.

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## 1.5. AGRICULTURAL INNOVATION AND SITE SPECIFIC FARMING

### Summary

One special frame of technological development in agriculture is precision farming technology. The national and international researches handle a lot with the effects of precision farming technology like a possible method of innovation. At the same time the diffusion of this technology is very slow from the practical appear in 1990. The obstructive factor of adjudge the spread of precision farming technology is that the definition of the farm which apply this is hard. Because of the application of the different technology elements are dependent on plant, soil, weed-coverage and management. The adaptation of the site specific technology like a new innovation in the process demands an extra investment in one hand and in the other hand necessitates precise work from everybody which goes together with change of approach. The aims of this study to examine that in which condition will be viable the adaptation of the precision farming technology and what kind of factors make faster the spread of the technology. The other question is that which element of the technology called innovation and what are the effects of these on the profitability.

**Keywords:** innovation, site-specific treatment, profitability, cost-efficiency

### Introduction

The permanent economic development of the enterprises is the key factor of the competition. Everybody agree with that the innovation is the basic of economic development, but the meanings of innovation are not uniform among the operators of the market. The scientists, the users, the politics, the costumer and the ordinary people use the innovation in different context. In many cases, innovation means something novelty or new establishment product or process or technology. In fact, the innovation is more than a new technology or methods. The innovation should not be totally scientific newest things or an earlier unknown things. The widest used definition of innovation is the following: “implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in-business practices, workplace organization or external relations.” (Oslo Manual, 2006, p.46)

### *Changes in the definition of innovation*

Over time, the nature and landscape of innovation have changed. Schumpeter was the first who said that the innovation is not only engineering invention. According to Schumpeter (1939), the innovation has an economic part too. The innovation contains

the newest combination of resources, new financing form, or the entrepreneur. The innovation is more than a unique or casual operation. It is the series of the interaction methods and process. (Morton, 1972) In the first edition of the Oslo Manual in 1992, the focus was on technological product and process innovation in manufacturing. The second edition of the Oslo Manual published in 1997, which expanded coverage to service sectors too. The non-technological innovation appeared in the second edition. The scope of innovation expanded to include two new types: marketing and organisational innovation. The latest version of the Oslo Manual is published in 2006 which was the third edition of its. These editions were the basic of surveys about the nature and impacts of innovation e.g. European Community Innovation Survey (CIS) made by Eurostat in every second year. The questionnaires of this survey are a good example to show the changes of the meaning of innovation over time.

The types of innovation in the EU innovation survey have expanded. In the beginning, it was only two kind of innovation (production and process). This two types have remained in each later survey but the meaning expand with some elements. For example in the beginning the innovation meant things which are developed by the own enterprises. In 2006, the innovation which are made by own or other enterprises are also fit to the meaning of product innovation. In 2012 the service (insurance, educational, consulting) were put to the list of product innovation. In the meaning of process innovation, we can see the same change. The organisational or managerial changes were not be included in innovation type until 2006. In this time, it was a part of process innovation, but in the CIS 2012, it became an individual type. The first appear of the marketing innovation was in the CIS 2006 and lessen with the routine changes in marketing methods in 2012. Table 1 summarizes changes in the definition of innovation in CIS.

The increasing of the research and development expenditure in business enterprises sector are national tendencies. The EU average is 1.3% of GDP. The V4 countries show different growth in innovation activities. Hungary spends around 1% of the GDP for R&D, Poland and Slovakia spend 0.4% of GDP for innovation. (Eurostat, 2015)

The innovation of a nation's economy is based on R&D activities- particularly in business enterprises – can be influenced by government regulation, e.g. taxation. Thanks to the EU-accession and the global financial crisis there are many direct and indirect tax system element have appeared for encouraging R&D activities. In the future, a positive improvement in tax allowances would be needed for innovative enterprises. (Illés et al., 2011; Illés et al., 2013, Hustiné Béres et al., 2014)

### ***Agricultural innovation***

The task of technical development is to pass the rewarding results of the R+D activities. In the area of agricultural innovation is very high-pressure problems are the technical or process developments. (Husti, 2008) Because of the specialty of agriculture the process of the agricultural innovation has unique form (Husti, 2011):

- more complex and less suggestible than the industrial production,
- natural and agro-climatic conditions have a great effect of the agricultural production,



**Table 1: Changes in the definition of innovation in CIS**

Type	CIS 3	CIS 2006	CIS 2012
<b>Product innovation</b>	Good/service which either new or significantly improved. It should be new to your enterprise, but it does not necessarily to be new to the market. Selling innovation which produced and developed by other enterprises shall not be included.	Complete CIS 3 with the following: It does not matter if the innovation was originally developed by your enterprise or by other enterprises.	Complete CIS 2006 with the following: A service is usually intangible such as insurance, educational courses, consulting, etc.
<b>Process innovation</b>	Includes new and significantly improved production technology, methods of supplying services and of delivering products. It does not matter if the innovation was originally developed by your enterprise or by other enterprises. Organisational or managerial changes shall not be included	Complete CIS 3 with the following: Exclude purely organisational or managerial changes.	Complete CIS 2006 with the following: Put the organisation innovation in separate part.
<b>Organisational innovation</b>	-	Implementation of new or significant changes in firm structure or management methods that are intended to improve your firm's use of knowledge, the quality of your goods/services of the efficiency of work flows.	Complete CIS 2006 with the following: including knowledge management, workplace organisation. It must be the result of strategic decisions taken by management. Exclude merges or acquisitions
<b>Marketing innovation</b>	-	Implementation of new/significantly improved designs or methods to increase the appeal of your products or to enter new market.	Complete CIS 2006 with the following: exclude seasonal, regular or routine changes in marketing methods.
<b>Innovation activities</b>	-	Include acquisition of machinery, equipment, software, licenses, engineering work, training when they are specifically undertaken to develop/implement a product/process innovation.	Complete CIS 2006 with the following: Include all types of R&D activities

Sources: own construction based on Community Innovation Survey's questionnaires

- natural and agro-climatic conditions have a great effect of the agricultural production,
- the time of the treatment is very important in biological and agro-technical point of view,
- the work time are different in the peak time (for example in harvest period),
- the innovation are different in time and in place.

The agricultural-technical developments never are self-interest. These developments should always be lead with production aims. The prime aim for agricultural-technical development is to the results of research put into practice. The agricultural innovations eventuate the higher profitability and economic growth, (Kapronczai, 2011) and shall be considered as an important tool of increasing competitiveness of agricultural enterprises (Illés and Dunay, 2014). The agricultural innovation includes chemical innovation (in fertilizer, in pesticides, in herbicides), technical innovation (in machinery and equipment) and biological innovation (in hybrids, in seeds). (Husti, 2011) In the practice the research of agricultural technical development materialize in the production technology. One of the well examined parts of the agricultural technical development is the precision farming technology.

The aim of this paper to show the precision farming technology in the different aspects of innovation, like process-, organizational-, environmental-, product- and marketing-innovations.

### **Precision farming technology as realization of agricultural innovation**

Beyond the traditional technology innovation a new business-model, a new organizational form, a new design or marketing-strategy are also mean innovation for companies. The most wide spread innovation type are the product and technical innovation. The practice can also speak about environmental innovation, marketing innovation, organizational innovation. (Schumpeter, 1939; Magyar Innovációs Szövetség, 2010)

Under innovation, the inputs and the yield of the agricultural enterprises are change. The precision farming technology is a kind of production and management methods which able to handle the homogeneity of production condition and thanks to this it fit to the expectation of the agricultural innovation.

### ***Technological innovation and precision farming technology***

According to Oslo Manual (2006), a process/technology innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. Process innovations can be intended to decrease unit costs of production or delivery, to increase quality, or to produce or deliver new or significantly improved products.

The agricultural technology innovation based on four pillars. These pillars are the biological, chemical, technical and human factors. (Dimény, 1975) The agro-technical development can not be self-intrest, it should be fit with economical and ecological

criteria. (Dimény, 1992) In this aspect the precision farming technology is the base of the sustainable agriculture. There are numerous researchers examined the correlation between the sustainability and precision farming technology. The latitude of this paper not allows to spread about in detail. (Weiss, 1996; Lambert and Lowenberg-DeBoer, 2002; Székely et al., 2000; Takács-György, 2008; Takács, 2008; Schmuk et al., 2009; Lencsés, 2013; Lencsés et al., 2014)

The appearance of global positioning system in the agricultural make possibilities for taking out the field-average treatment and handle the heterogeneity of the production factors (field, nutrients, etc.). In precision farming technology, the treatments are based on maps or on-line sensors. The treatment unit called management-zone and usually not bigger than 3 hectares.

The two technical methods of precision farming technology are the on-line and the off-line way. In on-line way the inputs optimized according the sensors (for example N-sensor or infra-red camera) information in real-time. In the off-line way, firstly the treating maps should be generated before the treating. The advantages of both methods to optimized inputs according to field-heterogeneity, and thanks to this increase the profitability of the process with decrease the environmental harm of the agriculture.

In summary the precision farming technology squarely fit the meaning of technological innovation because it is a new way of plant production. Change the field-average treatment for the management-zone based treatment (in the process of planning, treating and monitoring).

### ***Organizational innovation and precision farming technology***

According to Oslo Manual (2006), an organizational innovation is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations. Organizational innovations can be intended to increase a firm's performance by reducing administrative costs or transaction costs, improving workplace satisfaction (and thus labor productivity), gaining access to non-tradable assets (such as non-codified external knowledge) or reducing costs of supplies.

The precision farming technology is not only a new plant production method. An aim of precision farming technology (beyond the variable rate treatment in zone-by-zone) is to simplify the decision process thanks to the precise information base and the higher reaction for heterogenic production factors. In short, precision farming technology is information and remote sensing based farm management system. This system able to identify, examine the varying field parameters and lead the treatment in field.

The precision farming technology is an electronically observer system which monitoring the site-specific treatment of inputs, the timing of treatment, the process and the staff. (Lowenberg-DeBoer and Boehlje, 1997)

The switch to precision farming technology demand changes of the conventional thinking about farming. Come to the front the intention of exactitude of treatment. There are not permissible the margin from the plan or the overlaps in the field-twist.

In the aspect of organizational innovation very important to speak about the knowledge and acceptance of the philosophy of precision farming technology both on the management-level and on the staff-level. The staff should be understand and use the new and mostly informatics based system. The information-based precision farming technology is decrease the time-input for example vocational training, teaching, monitoring.

In summary the precision farming technology is an organizational innovation because the adaptation of the technology is require the changes in the working process. The tasks and time-input change with making of maps, input registration, etc.

### ***Environmental innovation and precision farming technology***

Precision farming technology is an information-intensive technology which is a part of the agricultural technical development. Precision farming technology is a complex, contiguous process and purposeful innovation activities which gives rise to changes in quality and quantity of agricultural production. These changes define in resources, for example soil parameters, human resource, equipment, information-system, etc. Finally the plant production is happen in the higher efficiency way.

The precision farming technology is a kind of environmental innovation because the prime aim of the technology is to reduce the environmental impacts of plant production. According to Wolf and Buttel (1996) precision farming technology increases the efficiency of production, decrease the environmental pollution. The input (seeds, nutrition, herbicide, pesticides, etc.) optimization happened zone-by-zone. Thanks to this the redundant of inputs in the soil are reduce.

### ***Marketing innovation and precision farming technology***

According to Oslo Manual (2006), a marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing. Marketing innovations are aimed at better addressing customer needs, opening up new markets, or newly positioning a firm's product on the market, with the objective of increasing the firm's sales

In marketing innovation, the primary aim is the demand of consumer. Nowadays there are no differences between the consumer demand with the conventional and precision farming technology. The consumers do not knows which technology used for their product. The precision farming technology use the same quantify inputs like the conventional farming.

There are unproven the quality increase of yield with the precision farming technology. Otherwise, in social-level the demand for the fork-to-fork monitoring of plant production is increasing. With precision farming technology, huge amount of information could be realized about the production process. The society requires the decreasing of environmental damage, ecological sustainability. Both demand make true with precision farming technology.

In summary, precision farming technology does not mean marketing very novelty innovation for producer or user because the preparation or use of equipment not goes

to the changes in the market issue. But because of the seasonality of agricultural machinery market thanks to the subsidies policy (Medina et al., 2015) the marketing innovation is very important for the machinery producers. They should find a new promotion way to increase their selling.

### ***Product innovation of precision farming technology***

According to Oslo Manual (2006), a product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics. Product innovations can utilize new knowledge or technologies, or can be based on new uses or combinations of existing knowledge or technologies.

The equipment for the site-specific production for the producer is a product innovation. Because the producers of equipment which able to implement the site-specific treatment in the practice. For this is necessary to make changes in the products, for example put GPS, board-computer on the tractor or put component which helps to variable rate treatment in for example the fertilizer.

### **Conclusions**

The condition of the successful innovation is the efficient information systems which react fast for the changes of micro and macro environment with quantity in the middle. Precision farming technology fit to these requirements. Thanks to the big amount of qualified information the system able to monitoring the production zone-by-zone.

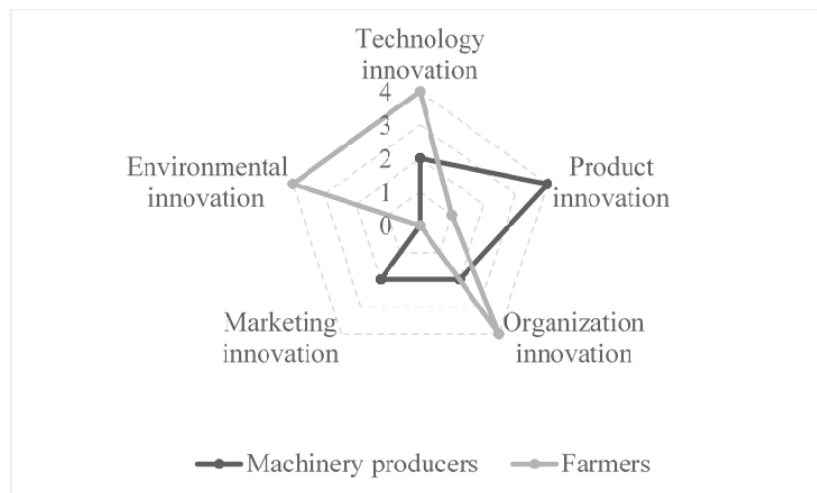
The precision farming technology improve the productivity of labor, productivity of inputs, quantity and quality of yield with attentive the aspects the sustainability. These parameters are the key factors of agricultural innovation, so the precision farming technology is a tool of innovation.

The precision farming technology squarely fit the meaning of technological innovation because it is a new way of plant production. Change the field-average treatment for the management-zone based treatment (in the process of planning, treating and monitoring). The precision farming technology is an organizational innovation because the adaptation of the technology is require the changes in the working process. The tasks and time-input change with making of maps, input registration, etc. The precision farming technology does not mean marketing innovation for producer or user because the preparation or use of equipment not goes to the changes in the market issue. The switch to precision farming technology demand changes of the conventional thinking about farming. Come to the front the intention of exactitude of treatment. There are not permissible the margin from the plan or the overlaps in the field-twist.

Thanks to the precision farming technology the enterprises able to make products with less inputs or reach the higher yield with the same amount of inputs. The agricultural enterprises would be cost-efficiency and environmental friendly thanks to the site-specific treatment. In the agricultural practice the precision farming technology is require the new way of thinking about plant production.

For machinery producers the produce of precision farming equipment is a significant novelty because it should built in some IT equipment too. The use of IT equipment in agricultural machinery changes are needed in the process of building machines and it results a very high novelty, sellable products. The machinery producers need more employees who work in IT and develop the application and sensor mechanism and software of the machines. (Figure 2)

**Figure 2: Novelty of precision farming technology for machinery producers and farmers**



Notes: Scale of novelty:

0 – no novelty, 1 – minor novelty, 2 – significant novelty, 3 – high novelty, 4 – very high novelty

Source: own construction

In case of environmental innovation, it does not appear for the machinery producers but it has a very high novelty for the farmers who use the precision farming equipment. Because the farmers able to highly increase the environmental damage of their plant production with precision farming technology. The product of the farmers has less environmental damage but the market does not pay more money for this kind of product. Thanks to the precision farming, the fork-to-fork production became real but for the farmers the product with use precision farming technology has only minor novelty.

Machinery producers need to find different marketing communication methods for selling the precision farming equipment. Farmers can sell their product in the same way than earlier but they need to make lot of changes in their organization. The farmers need employees who are able to use the new information technology based machineries.

The novelty of precision farming technology for the machinery producers and farmers appear in different way, but it has some aspects, which mean a very high novelty for them. For the farmers there are three types of very high novelty innovations (technology, environmental and organizational innovations), while machinery

producers have only one kind of very high novelty innovation (product innovation) but the other type of innovation has a medium novelty. It should be highlighted that the area of the innovation in Figure 2 is almost the same in the case of machinery producers and a case of farmers, which shows its importance for both parties.

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## 1.6. NEW METHODS IN THE EVALUATION OF REPRODUCTIVE PERFORMANCE IN THE HUNGARIAN DAIRY HERDS

### Summary

The aim of this study is to assess the average values of the most commonly used reproductive indices, to introduce more recent parameters for measuring reproductive performance and to suggest reference values for the latter, based on a survey carried out in Hungary. Data were collected from February to May 2015, and altogether 12,723 cows were included from 21 herds in six counties. Average values of the conventional indices were: SP: 160 days, SPC: 4.27 and CR1: 22%. The SP, SPC and CR1 were much poorer than the former reference values even in the best herds. It was proven that PR is suitable for a quick review of the reproductive performance; therefore this parameter is advised for routine use in dairies. In this study, cPR was introduced as a novel parameter that is destined for overcoming inaccuracies stemming from Hungarian culling policy. Suggested reference values of the more recent parameters are: PR: 9.4%, cPR: 18%. %PORP is preferable to %Preg, since it applies only to the reproductive proportion of the herd, and its value is not influenced by the seasonal changes (calving, culling) to such a great extent and for such a long time. The use of some relevant parameters (PR, cPR, CR1, SP, %PORP) is enough for the daily routine, but in-depth analysis is required when the reproductive performance is diminishing.

**Keywords:** reproduction, dairy cattle, evaluation, parameter, pregnancy rate

### Abbreviations

**%CULL:** Percentage of culled cows  
**%PORP:** Percentage pregnant in ORP  
**%Preg:** Percentage pregnant  
**%Preg200:** Percentage pregnant within 200 DIM  
**bST:** bovine somatotropin  
**cPR:** Corrected Pregnancy Rate  
**CR:** Conception Rate  
**CR1:** Conception rate of first inseminations  
**DIM:** Days in Milk  
**DS1I:** Days to successful first insemination  
**HDR:** Heat Detection Rate  
**IBI:** Interbreeding interval

**O285:** Open cows beyond 285 DIM  
**O60:** Open cows beyond 60 DIM  
**ORP:** optimal reproductive population  
**PR:** Pregnancy Rate  
**PRP200:** Pregnancy rate of pregnant cows within 200 DIM  
**R21:** Re-insemination at 12-21 days  
**SP:** Service period  
**SP200:** Service period within 200 DIM  
**SPC:** Services per conception  
**SPCP200:** Services per conception of pregnant cows within 200 DIM  
**VWP:** Voluntary Waiting Period

## Introduction

The primary source of income of the dairy farms is the amount of milk sold. Profitability is fundamentally influenced by the reproductive success of the herd. Reproductive disorders lead to longer calving interval (therefore, both the annual milk production and the number of calves born are decreased), more involuntary cullings, excess semen usage and higher veterinary costs. The economic consequences of these effects can be quantified (Ózsvári, 2013; Ózsvári - Kerényi, 2004).

Milk production of the Holstein-Friesian cows has increased dramatically in the recent decades, which – together with other factors, such as environmental issues (e. g. climate change), more intensive nutrition, housing, genetic changes – altered the reproductive characteristics of this breed, as well (Lucy, 2001). The length of oestrus has decreased from 12-15 hours to approximately 8 hours on average, moreover, the signs of oestrus have become less pronounced, as well (Nebel, 1993; Nebel et al., 2000). The length of the oestrus cycle has increased from 20.3 days to 22.3 days, fertility of the first inseminations has decreased by 15.9% and calving interval has become 20 days longer in the period involved in a study (Stevenson, 2011).

The built-in analyses of the widely used farm management software and evaluation systems usually put large emphasis on some more conventional reproductive indices in Hungary, such as productivity, calving interval, services per conception and the proportion of pregnant cows. The way of calculating productivity is inconsistent in the different books and softwares, furthermore, this index is usually considered outdated (Pécsi, 2007). Calving interval should be used prudently, as well, since this parameter does not take primiparous cows into account, which may account for 30-40% of a dairy herd. Furthermore, this parameter can be considered historical, because events which occurred up to 2 years before the date of the evaluation are involved (Farin & Slenning, 2001; Fetrow et al., 2007).

Increased number of services per conception account for 6.5-13.4% of reproductive losses, which can cause a five-digit loss in euro in large scale dairy herds, however, even the minor increase of the service period leads to larger economic losses (Fodor, 2011; Ózsvári, 2004; Ózsvári, 2013). This parameter has been generally used for the evaluation of the inseminators' work, however, the reproductive success is influenced by a number of factors, which can be quantified by more relevant parameters. Culled cows and cows that have recently calved and are therefore not suitable for insemination are often involved in the calculation of the proportion of pregnant cows, which causes interferences at the evaluation. Outdated reference values are often used at the evaluation of the conventional indices, which are not realistic goals in the modern, high-yielding, intensively managed herds, where the reproductive performance of the cows is impaired.

Different housing and milking technologies, farm management softwares and protocols have been imported from the US to Hungary in the recent years. These farmers usually use the imported parameters and reference values in the reproductive management. However, there are a number of fundamental differences between the reproductive management in the US and in Hungary. In the US, the VWP (Voluntary Waiting

Period) is widely used in the dairies. VWP indicates the period after calving until the cows remain deliberately unserved, which usually lasts for 60 days. Culling criteria are essentially different, as well: cows are usually not inseminated beyond 200 DIM and below 30 kg daily milk yield (DCRC, 2014). The usage of bST and timed insemination programmes are common in US dairies, semen and drug costs are significantly lower, labor cost is significantly higher and the quality of feedstuff is more balanced, all of which underpin the idea that the reference values used in the US cannot be used directly among the Hungarian circumstances. HDR, CR and PR are routinely analysed when evaluating reproductive performance. A simple mathematical equation describes the relationship among these parameters:  $\text{HDR} \times \text{CR} = \text{PR}$ . Heat Detection Rate shows the proportion of cows actually inseminated within a 21-day period (which equals to the length of the oestrous cycle) that of eligible for insemination within the same time frame. Conception Rate is actually the inverse of the services per conception.

Pregnancy Rate indicates the number of conceived animals that of eligible for insemination within a 21-day period. The major advantage of PR is that it covers the efficiency of the reproductive management, the fertility of the herd and the time, as well. The farm management softwares commonly used in Hungarian dairy farms are not capable of calculating PR or do not calculate PR properly, since these are unable to collect data according to the 21-day long oestrus cycle. The underlying principle behind the calculation of PR is that the number of pregnant cows has to be divided by the number of possible oestrus cycles in the optimal reproductive population (ORP), irrespective of being inseminated or not. ORP consists of the cows beyond the VWP that have not yet been culled.

According to these factors, the evaluation of reproductive performance varies greatly among dairy farms in Hungary. Firstly, the authors aimed to determine new, achievable reference numbers for the conventional parameters. Secondly, more relevant reproductive indices were defined and their reference numbers were suggested in this work. Thirdly, corrected PR (cPR), as a new parameter for measuring reproductive success, was developed and its suitability for routine use was tested. Corrected PR was developed to tailor PR to the Hungarian circumstances, thus, its advantages can be pushed.

### **Materials and methods**

The authors surveyed production and reproduction indices and the reproductive management in large-scale Hungarian dairy herds. The data of 12,723 cows were collected in 21 herds in six Hungarian counties between February and May 2015.

Herd-level reproductive data - regarding the performance of 2014 - originated from the built-in analyses of the farm management software RISKAs, which was used in all of the surveyed dairy herds. Cow-level data were also collected from RISKAs (ear tag number, date of calving, parity, status code [0 = open, not inseminated; 1 = inseminated; 2 = pregnant], date of last insemination, number of last insemination, last test-day milk yield, date of culling), which were used in the calculation of different reproductive parameters.

Reproductive indices were grouped according to the proportion of the herd included in the calculation of the respective parameter. Parameters were grouped according to their availability from the farm management software, as well, since several indices were not readily available in RISK A, and were calculated from the cow-level data. However, the optimal VWP varies among dairies to a limited extent, 60 days was uniformly used in this work.

### ***Parameters considering all cows***

These parameters are readily available in the farm management software used in the present study. All cows in the herd are included in the calculation of these indices. The performance of the herds in 2014 was examined.

- Percentage of culled cows (%CULL): indicates the percentage of cull candidates and already culled cows.
- Open cows beyond 60 DIM (O60): indicates the percentage of not inseminated, or inseminated, but open and not re-inseminated cows. The denominator is the number of non-cull cows beyond the VWP.
- Service period (SP): indicates the average time it takes for the cows to conceive. Only pregnant cows are considered.  $SP = \Sigma \text{ DIM to conception (pregnant cows)} / \text{number of pregnant cows}$ .
- Interbreeding interval (IBI): indicates the average number of days between two subsequent inseminations.
- Re-insemination at 12-21 days (R21): indicates the percentage of re-inseminations carried out 12-21 days after the previous insemination within the total number of re-inseminations.
- Services per conception (SPC): indicates the total number of inseminations carried out in a period divided by the number of conceived cows in the same period.
- Days to successful first insemination (DS1I): the average service period of the cows that conceived for the first insemination.
- Conception rate of first inseminations (CR1): indicates the percentage of cows in a period that conceived for the first insemination.
- Percentage pregnant (%Preg): indicates the proportion of pregnant cows as a percentage of the total number of cows in the herd.

### ***Parameters considering ORP cows***

Cows beyond VWP and not culled were regarded as ORP cows. Only these cows were taken into account at the calculation of the following indices. Since open cows beyond 200 DIM are usually culled in the US, it was used as a reference here, as well. On the one hand, these indices describe reproductive performance in a more realistic way, on

the other hand, they facilitate the comparison of the results of the dairies internationally.

- Percentage pregnant in ORP (%PORP): cull cows are not taken into account, because they should not be inseminated. Similarly, if VWP is strictly applied (here 60 days), then pregnant cows should only be searched for among the cows that calved before this date.
- Service period within 200 DIM (SP200): SP was quantified for every single pregnant cow, and the average SP was calculated for those conceiving within 200 DIM.
- Percentage pregnant within 200 DIM (%Preg200): expresses the percentage of pregnant cows with an SP below 200 days.
- Services per conception of pregnant cows within 200 DIM (SPCP200): expresses the average number of inseminations needed for those cows conceiving within 200 DIM.
- Open cows beyond 285 DIM (O285): indicates the percentage of cows within the ORP, which have been milking for more than 285 days, produce less than 25 kg milk daily and are open.
- Pregnancy Rate (PR): the theoretically possible number of oestrus cycles of the pregnant cows was calculated by subtracting VWP from the SP, and this was divided by 21. The result was rounded upwards (e.g. if the quotient was 1.24, then it should be rounded up to 2). The way of calculation is similar in the case of the nonpregnant cows, as well, but VWP was subtracted from DIM. The possible number of oestrus cycles was summed up for all the ORP cows and the number of pregnant cows was divided by the sum.
- Corrected Pregnancy Rate (cPR): for those cows conceiving within 200 DIM, the number of pregnant cows was divided by the total number of possible oestrus cycles until conception, as described at PR. Actually, this way the pregnancy rate of pregnant cows within 200 DIM was calculated (PRP200). Assuming that during the same period (i.e. average number of days to conception of the pregnant cows) equal number of oestrus cycles occurred in the nonpregnant population, as well, cPR was calculated as follows:  $cPR = PRP200 / 2$ .

Production and reproduction parameters were analysed by Microsoft Excel<sup>®</sup>.

## Results and discussion

### *Evaluation of the reproductive performance of the surveyed herds*

The most important production and reproduction parameters of the surveyed herds are shown in Table 1.

**Table 1: Production and reproduction parameters of the herds**

<b>Parameter</b>	<b>Average</b>	<b>Minimum</b>	<b>Maximum</b>
Number of cows	606	169	1269
%CULL	5	0	17
Lactational milk yield (kg)	9851	8200	12174
O60 (%)	12	2.2	34
SP (days)	160	125	205
IBI (days)	29	23	38
R21 (%)	46	26	61
SPC	4.27	2.8	7.2
DS1I (days)	76	52	107
CR1 (%)	22	14	36
%Preg	43	28.8	60.5
%PORP	53	37	67
SP200 (days)	109	95	121
%Preg200	72	56	86
SPCP200	2.06	1.49	2.41
PR (%)	10	4.4	16
cPR (%)	18	14.6	23.11

Source: own calculation

Remarkable differences can be found among the dairy herds. Table 1. shows that the performance of the dairies do not comply with the former – but commonly used – reference values. Suggested values for SP was below 115 days, >60% for CR1 and 1.5-2.2 for SPC (Radostits et al., 1994; Szenci, 1999). It is remarkable, that even the best herds could not reach these goals set up in the ‘90s.

The herds were ordered according to their PR, and by ignoring the results of the four best and four worst dairies, “tightened” averages of the examined parameters were calculated. A difference exceeding two percentage points was found only in the case of R21 (average: 45.7%, “tightened average”: 42.2%), which underpins that the “Average” numbers shown in Table 1. can be reached even among average Hungarian circumstances, but herds with such or worse results should improve reproduction.

In order to evaluate PR compared to the other parameters, the reproductive indices of the four best and the four worst dairies (ordered by PR) were summarized (Table 2).

**Table 2: Reproduction parameters of the herds with the four best and four worst Pregnancy Rate**

Parameter	Herds with the best PR				Herds with the worst PR				Average		Difference
	A	B	C	D	E	F	G	H	„Good”	„Bad”	
Number of cows	1012	723	412	1081	487	279	480	402	807	412	
Lactational milk yield (kg)	9200	10800	9300	9500	9900	9600	9400	8900	9700	9450	
SP (days)	131	125	134	131	163	166	205	168	130.3	175.5	+35%
R21 (%)	60	49	50	52	47	28	56	26	52.8	39.3	-26%
CR1 (%)	25	36	27	27	19	17	21	21	28.8	19.5	-32%
%PORP	67	59	60	55	41	42	44	59	60.3	46.5	-23%
%Preg	61	47	50	47	34	35	34	48	50.9	37.8	-26%
SP200 (days)	103	101	101	102	121	110	121	114	101.8	116.5	+14%
%Preg200	83	86	82	82	74	72	56	71	83.3	68.3	-18%
PR (%)	16	15.8	13.1	12.3	7.1	6.9	5.9	4.4	14.3	6.1	-58%
cPR (%)	19.6	20.5	20.3	20.0	14.7	17.7	14.6	16.3	20.1	15.8	-21%
O285 (%)	1.2	0.0	1.3	2.4	6.2	2.6	7.8	3.5	1.2	5.0	+316%
SPC	3.78	3.2	3.2	3.3	6.2	5.1	4.1	4.2	3.4	4.9	+44%

Source: own calculation

Herd size is remarkably different between the two groups, while lactational milk yield is similar. Herds with better PR outperformed the other group regarding all the parameters. The difference exceeded 20% in several parameters (SP: 35%, R21: 26%, CR1: 32%, %PORP: 23%, %Preg: 26%, cPR: 21%). Results of these herds support that good reproductive performance can be achieved on Holstein-Friesian farms despite larger herd size and high milk yield. Huge difference was found regarding O285 (316%) and SPC (44%), which called for further analysis.

The dairies were ranked by all of the reproductive indices in order to examine the relationship between PR and culling intensity, the latter being expressed by O285. After that, farms were ordered according to their PR and their ranks in other indices were analysed (Table 3).

**Table 3: Ranks of the surveyed dairy herds in the different reproductive indices**

	O285	Rank in the respective parameter								Average
		PR	cPR	O285	SP	CR1	%PORP	SP200	%Preg200	
PR% 1-10.	1.2%	1	6	2	2	8	1	5	2	3
	0.0%	2	2	1	1	1	5	3	1	2
	1.3%	3	3	4	4	4	4	2	3	3
	2.4%	4	4	9	3	5	9	4	4	5
	1.6%	5	12	5	6	7	2	10	5	7
	2.1%	7	8	8	11	16	3	8	15	10
	2.8%	6	9	12	14	14	7	9	11	10
	3.1%	8	1	13	5	6	10	1	7	6
	2.0%	9	13	7	8	12	16	13	13	11
	3.1%	10	5	14	16	17	8	6	16	12
Average	2.0%	6	6	8	7	9	7	6	8	7
PR% 11-21. Average	3.7%	15	14	13	13	11	14	14	13	13

Source: own calculation

The first 10 farms according to PR generally outperformed the others in O285 (average O285 rank 8 vs. 13), which means that the proportion of open cows beyond 285 DIM (i.e. in the lower-producing period of the lactation) was smaller in these herds. These herds outperformed the others regarding the other parameters, as well.

The herds were ranked according to SPC, and their results in SP, CR1, SP200 and PR were analysed (Table 4).

**Table 4: Reproductive indices of the surveyed herds with best SPC**

	SPC	Rank in the respective parameter					Average
		SPC	SP	CR1	SP200	PR	
SPC 1-5.	2.8	1	4	4	4	3	3.2
	3.2	2	10	2	18	12	8.8
	3.3	3	3	5	5	4	4
	3.3	4	5	6	1	8	4.8
	3.3	5	19	3	15	15	11.4
Average	—	3	8	4	9	8	6.4

Source: own calculation



The best performing herds in terms of SPC achieved poor results in other parameters, especially in SP, SP200 and PR. E.g. the herd with second best SPC was only 10<sup>th</sup> in SP, 18<sup>th</sup> in SP200 and 12<sup>th</sup> in PR. It can be explained by the common practice that the work of the inseminators is often evaluated based on the SPC, who, therefore, tend to inseminate only the cows which will most probably conceive. It leads to longer SP and lower PR.

### *The applicability of cPR in the practice*

cPR, as a new index for measuring reproductive success, was developed to eliminate the effect of the culling habits of Hungarian farms – which are fundamentally different from that of the US – on PR. The relationship of cPR with PR and other parameters was analysed (Table 5).

The data of those herds were used in these analyses, where the difference between PR and cPR rank was remarkable, or the PR and cPR results of the herd were contradictory compared to the reference values (threshold: PR: 9.4, cPR: 18). This analysis was carried out because the primary aim of cPR is to highlight poor reproductive performance irrespective of culling intensity, even when PR is acceptable.

**Table 5: The comparison of cPR with PR and other reproductive parameters**

Parameter		Herd				
		A	B	C	D	E
PR vs. cPR	PR	9.4	8.3	10.5	10.5	12.2
	cPR	19.7	19.2	18.4	18.1	17.6
	PR rank	10	13	7	6	5
	cPR rank	5	7	8	9	12
	cPR rank – PR rank	-5	-6	1	3	7
	O285	3.1	4.5	2.1	2.8	1.6
Rank in the respective parameter	SP	16	7	11	14	6
	CR1	17	19	16	14	7
	%PORP	8	15	3	7	2
	SP200	6	7	8	9	10
	%Preg200	16	10	15	11	5

Source: own calculation

In herd A and B good cPR was achieved along with relatively high O285. On these farms SP200 was low (cows conceived quickly within 200 DIM), but the proportion of cows conceiving within 200 DIM (%Preg200) was small. Therefore, PR and other reproductive indices turned out to be poor. In herds C, D and E good PR was observed along with average O285; cPR was around the threshold. The latter group of farms had poor performance regarding other parameters, as well.

Based on the results, if PR is low and cPR is high, or PR is acceptable-good and cPR is around or below the threshold, culling and first inseminations should be supervised and other parameters should be examined, as well. The evaluation of cPR may complement the use of PR in the field, and it may be suitable for international comparisons, following more widespread field analysis.

### ***The applicability of PR and other suggested parameters in Hungarian dairies***

#### *Evaluation of PR in the Hungarian dairy farms*

PR indicates both good and poor reproduction properly, therefore, the evaluation of this index is of paramount importance in the field work. In order to carry out more detailed evaluations of the reproductive performance, other parameters should be analysed, of course. However, PR is influenced greatly by culling intensity, low PR generally indicates poor reproduction.

In the herds experiencing high O285 and low PR, reproductive management and culling should be supervised. Culling intensity is important from another point of view, as well: cows with lower fertility can influence the results of the whole herd, which may initiate incorrect management decisions. It is advised to complement PR with cPR due to the various culling protocols applied in Hungary.

PR is much more informative than SPC when it comes to the evaluation of reproduction. Good SPC does not necessarily mean good PR, because the latter is greatly influenced by SP, as well. The results of this study confirm that SPC should not be regarded as one of the most important parameters during a quick-check.

#### *VWP and CRI*

It was revealed in the present study, that VWP is generally not applied in the Hungarian dairies as strictly as in the US, since cows showing oestrus signs early in lactation are often inseminated. Huge differences (even 100 days!) may appear in the days to first insemination among the cows, however, the average may remain on a good level. The range of days to first inseminations has to be considered, too, when determining the real VWP.

CR1 provides information about the quality of the uterine involution and the energetic status in the early lactation, therefore, shows the adequate time of first inseminations. Remarkable difference in CR1 was shown between the high- and low-PR groups in Table 2. (average: 28.8% vs. 19.5%). Higher CR1 may have played a role in the better SP200 result of the high-PR group (101.8 vs. 116.5 days), furthermore, CR1 is essential for a good SPC, as well.

The length of the VWP should be tailored to the characteristics (human resource, technology, feeding, etc.) of the dairy farm. DS1I, CR1 and SP200 provide assistance in the setting up and controlling of VWP.

#### *The application of %PORP in Hungarian dairy farms*

The proportion of pregnant cows is an important issue, however, analyses should be carried out prudently, since a number of factors may influence the results, e.g. the date and frequency of pregnancy check, and the time of recording of the findings of the pregnancy check in the farm management software (either at the early pregnancy diagnosis or when the pregnancy is confirmed).

The difference between %Preg and %PORP and the influence of the pregnancy check on these parameters are shown in Table 6.

**Table 6. The relationship of %Preg and %PORP and their changes after pregnancy diagnosis**

<b>Time of data recording</b>	<b>Total No. of cows</b>	<b>No. of pregnant cows</b>	<b>%Preg</b>	<b>Cull cows</b>	<b>Within VWP</b>	<b>%PORP</b>
Before pregnancy check	589	251	42.6%	12	32	46.1%
Before pregnancy check, after culling	589	251	42.6%	14	32	46.2%
After pregnancy check	589	304	51.6%	14	38	56.6%

Source: own calculation

The difference is remarkable between %Preg (which compares the proportion of pregnant cows to the size of the whole herd) and %PORP (which considers only the optimal reproductive population). The difference may be further enlarged by cullings and seasonal dump calvings. Both parameters improved significantly after pregnancy check, thus, the time of pregnancy diagnosis relative to the evaluation of these parameters should be clarified.

The advantage of %PORP is the same as that of PR: both express the performance of the reproductive population. The disadvantage of %PORP is that comparisons can only be made after pregnancy diagnosis.

## Conclusions

The evaluation of reproductive performance has become very diverse among the dairy herds in Hungary due to the changes of the Holstein-Friesian cows, housing, feeding and imported techniques and evaluation systems from the US. Farmers should receive more up-to-date information about the achievable goals instead of using outdated reference numbers.

The present work revealed that these outdated reference numbers cannot be achieved even by the best herds. PR turned out to be useful among Hungarian circumstances, however, culling intensity should be taken into account when evaluating this index. Therefore, cPR was developed, which aims to overcome difficulties stemming from the Hungarian culling policy. The regular recording and analysis of some relevant parameters is adequate for the daily routine, but in-depth analysis is required when the reproductive performance is diminishing.

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## 1.7. LEGAL ASPECTS OF FOOD SAFETY

### Summary

The aim of the article is to analyze the Polish and EU regulations on food safety. Food is essential to life of every human, so it is important to its safety. Consumers bear all risks associated with the consumption of the food that is why regulations are necessary to ensure protection from the consumption of harmful substances. These regulations shall apply to both methods of food production and the placing on the market. The basic legal act regulating this issue is the Act of 25th August 2006 concerns food safety and nutrition, which is the frame work which regulates in a comprehensive manner the conditions necessary to ensure food safety “from farm to a table”. Poland, like all European Union countries, forming the so-called rules apply “Hygiene package” comprising four regulations laying down rules for the hygiene of foodstuffs and the rules of conduct food sector regulatory authorities. Consumer safety cannot be provided just by the relevant legislation. It is essential to the proper application of the rules.

**Keywords:** food, security, legal regulations, consumer, producer

### Introduction

Globalization is “the process of creating the liberalized and integrated world market of goods and services and the international institutional order for the world-wide development of production, trade and financial flows” (Kołodko, 2001, p.26 ). The phenomenon of “the globe shrinking”, apart from numerous advantages, such as: ease of movement, access to the achievements of culture, science and technology brings about some negative consequences in many fields, e.g. organized crime. The emergence of transnational enterprises, which operate in many regions in the world, also contributes to the spread of pollution beyond the borders of a single country or region (Czerny M., 2005).

The pollution may also refer to food. Therefore, the regulations for food safety play such an important role. It should be pinpointed that in the subject literature there are terms: “food security” and “food safety”. “While discussing the complexity of the problem of food safety, there should be identified its elements and their significance with reference to current trends taking place in the contemporary world economy. From among many definitions of this term, the one, formulated by two American sociologists, L. Bush and W.B. Lacey deserves a special attention. They state that “food security has at least three dimensions: the first one is availability, i.e. having enough food available for all the population at all times to sustain human life. The second dimension of food security is accessibility. Food supply should not be limited by what economists call effective demand (...). The third dimension is adequacy (...).

Adequacy can be understood in the category of a balanced food ration while, at the same time, adequate food supply is free from diseases and toxic substances” (Michalczyk, 2012, p.8). “In legal terminology, ‘food security’ can be defined as an optimal state assumed by the legislator that should be achieved in accordance with the relevant provisions of both the international, EU and domestic law.” (Leśkiewicz, 2012)

“The significance of security and quality of foodstuffs is undoubtedly related to the possibility of risks, most of all, micro-biological ones, and also chemical or physical ones, which may adversely affect the product at various stages of its acquisition and processing” (Kielesińska, 2012). The above definitions indicate different approaches to the concept of food safety. In the present paper, food safety is understood as producing, transporting and ultimately providing customers with products free from any contamination.

Food is essential for life of every human being, therefore, its safety is so important. Consumers take the whole risk associated with the consumption of food; therefore, legal regulations providing their safety against the intake of harmful substances are necessary. These regulations must refer to both the ways of manufacturing foodstuffs and introducing them onto the market. However, discussing all these regulations in the paper is not possible. There will be presented the regulations concerning the basic terminology of food law: the concept of food, foodstuff, and food supplements. Poland, like all the Member States of the European Union, is obliged to observe the EU legal regulations. The first legal act of the EU food law is the Regulation (EC) No 178/2002 of the European Parliament and the Council of 28 January 2002 laying down the general principles and requirements of food law, appointing the European Food Safety Authority, and laying down the procedures concerning food safety (Dz. Urz. UE L 31 of 1.02.2002) (hereinafter referred to as the General Food Law - GFL). It specifies, in Article 3, section 1, the food law of the European Union; “food law” amounts to statutory, executive and administrative provisions regulating food in general, and their safety in particular, both at the level of the Community and at the national level; this definition includes all the stages of production, processing and distribution of food and feed manufactured for farm animals or used to feed farm animals”. “The stages of production, processing and distribution” amount to every stage from the production of basic food, through its storage, shipment, sale or supply to consumers, and also carriage, production, manufacturing, storage, shipment, sale and supply of feed. As it results from the preamble to the Regulation, free movement of food and feed in the European Union is possible only when the requirements for food and feed safety within the Member States do not significantly differ from each other. Poland, like all the Member States, is obliged to observe the provisions creating, so called, Hygiene Package, including four regulations laying down the principles of hygiene of foodstuffs and the rules of conduct of the authorities supervising the food sector. These are:

- Regulation (EC) No 853/2004 of the European Parliament and the Council of 29 April 2004 on the hygiene of foodstuffs



- Regulation (EC) No 882/2004 of the European Parliament and the Council of 29 April 2004 on official controls performed to ensure the verification of compliance feed and law, animal health and animal welfare rules.
- Regulation (EC) No 853/2004 of the European Parliament and the Council of 29 April 2004 laying down specific hygiene rules for on the hygiene of foodstuffs
- Regulation (EC) No 854/2004 of the European Parliament and the Council of 29 April 2004 laying down specific rules for the organization of official controls on products of animal origin intended for human consumption

The basic Polish legal act regulating this issue is the framework Act of 25 August 2006 on food and nutrition safety (hereinafter referred to as AFN), which comprehensively regulates the conditions necessary to ensure food safety “from farm to table”. Section 1 of the Art.1 indicates that the law regulates the requirements and procedures necessary to provide food safety in accordance with the regulations of the European Union and, in section 2, it indicates the EU regulations.

Both GFL and AFN are not applicable to primary production for private domestic use or to the domestic preparation, handling or storage of food for private domestic consumption (Art.1 section 3 of GFL, as well as Art. 2 section 2 of AFN). The Polish law also excludes the application of its provisions to the people individually collecting mushrooms growing in natural conditions (Art. 2 section 2 of GFL).

### **The concept of food**

Food is defined differently. Colloquially, the concept of food is understood as food products, food and nourishment. (Polański E. (ed.), 2012 ). "Food is called the edible parts of plant and animal tissues in their natural or processed state that, when eaten and assimilated by the human body, can be a source of different nutrients. In accordance with the terminology, the concept of food does not include:

- animal feed, live animals, if they are not marketed as food intended directly for consumers,
- plants prior to harvesting,
- medicinal products,
- cosmetics, tobacco and tobacco products,
- -narcotic drugs and psychotropic substances,
- feed,
- residues and contaminants.” (Kumirska et.al., 2010)

“Food can be assigned many functions. The basic one is physiological function, conditioning the existence of a human being and their biological development but satisfying hunger and the pleasure of eating is not less important.” There are also other functions of minor importance but clearly present in reality (...) satisfying the need for sharing meals by the family, other social and religious groups, the share of food in liturgical celebrations and mental compensation”( Czechowski, 2011)

For food legislation, the concept of food is of the key importance. AFN, in Art.3 section 1, indicates that food (foodstuff) is any substance or product within the meaning of Art. 2. of GFL. Polish provisions refer straight to the EU Resolution,

according to which food (foodstuff) “means any substances or products, whether processed, partially processed or unprocessed, intended for human consumption or, whose human consumption may be expected”. On the other hand, foodstuff is: soft drinks, chewing gum and any substances, including water, intentionally added to food during its manufacture, preparation or processing. This definition includes water according to the standards specified in accordance with Art. 6 of Directive 98/83/EC and without prejudice to the requirements of Directives 80/778/EEC and 98/83/EC.

Water, in accordance with EU regulations, should be considered as food from the moment of the water outlet from the source, e.g. water intake facilities, cisterns or from the moment of placing water in bottles or containers. Therefore, water is considered as foodstuff from the moment it can be consumed by the man.

The concept of foodstuff does not include:

- a. feed;
- b. live animals unless they are to be marketed for human consumption;
- c. plants prior to harvesting;
- d. medicinal products within the meaning of Council Directives 65/65/EEC (1) and 92/73/EEC (2);
- e. cosmetics within the meaning of Council Directive 76/768/EEC (3);
- f. tobacco and tobacco products within the meaning of Council Directive 89/622/EEC (4);
- g. narcotic or psychotropic substances within the meaning of The Only Convention on Narcotic Drugs of 1961 and The Convention on Psychotropic Substances of 1971;
- h. residues and contaminants” (Art. 2 GFL)

The definition of food in the EU law is modeled on Codex Alimentarius.” For the purposes of the Codex Alimentarius: Food means any substance, whether processed, semi-processed or raw, which is intended for human consumption, including drink, chewing gum and any substance which has been used in the manufacture, preparation or processing of “food” but does not include cosmetics or tobacco or substance used only as drugs” (Code of Ethics for International Trade in Food, CAC/RCP 20-1979 (Rev.1-1985) and includes definitions of food in the legislation of the Member States. In the British law, according to Food Safety Act of 1990: (1) In this Act “food” includes-(a) drink; (b) articles and substances of no nutritional value which are used for human consumption; (c) chewing gum and other products of a like nature and use; and (d) articles and substances used as ingredients in the preparation of food or anything falling within this subsection.(2) In this Act “food” does not include - (a) live animals or birds, or live fish which are not used for human consumption while they are alive; (b) fodder or feeding stuffs for animals, birds or fish; (c) controlled drugs within the meaning of the Misuse of Drugs Act 1971; or (d) subject to such exceptions as may be specified in an order made by the Secretary of State - (and) medicinal products within the meaning of the Medicines Act 1968 in respect of which product licenses within the meaning of the Act are for the time being in force; or (ii) other articles or substances in respect of which such licenses are for the time being in force in pursuance of orders under section 104 or 105 of the Act (the application of Act to other articles and substances).”(Szymecka-Wesołowska, 2013) As it results from the

definition of GFL, a potential possibility of consumption of the product by humans is enough to qualify it as foodstuff and include in the food law regulations. In cases where the specific substance may be used for both human consumption and other industrial purposes, it must meet the conditions required for foodstuffs until proven that is not suitable for human consumption.

### **Food supplements**

There are also food supplements available on the market. They are not food but they are consumed by people. Therefore, the EU and Polish law include their definition. Food supplement is foodstuff being the supplement of a regular diet. A regular diet is a balanced and varied diet. “An adequate and varied diet could, under normal circumstances, provide all nutrients necessary for proper development and maintenance of healthy lifestyle in quantities meeting the standards established and recommended by generally accepted scientific data” (item 3 of the preamble of the Directive 2002/46/EC). Food supplement, in accordance with the Polish and EU provisions, is intended only to complement a regular diet.

In accordance with Art. 3 section 3 item 39 of GFL, food supplement is foodstuff which is: the supplement of a regular diet; concentrated source of vitamins, minerals or other substances, single or complex, indicating nourishing or another physiological effect; placed on the market in the form that allows dosage, in the form of: capsules, tablets, pills and other similar forms, sachets of powder, ampoules of liquid, drop dispensing bottles and other similar forms of liquids or powders intended to be consumed in small, measured amounts of units. Lack of fulfillment of any of the above criteria brings about that the substance cannot be considered as food supplement. The supplement may not have the properties of a medicinal product within the meaning of pharmaceutical legislation. In accordance with Art. 2 item 32 of pharmaceutical legislation, a medicinal product is “any substance or combination of substances presented as having properties for preventing or treating disease in human beings or animals or administered with a view to making a medical diagnosis or to restoring, correcting or modifying physiological functions in humans by exerting pharmacological, immunological or metabolic action”. On the other hand, Art. 1 item 2 of the Directive 2001/83/EC indicates that a medicinal product is: a) any substance or combination of substances presented as having properties for treating or preventing disease in human beings; or b) any substance or combination of substance which may be used in or administered to human beings with a view to restoring, correcting or modifying physiological functions by exerting a pharmacological, immunological or metabolic action, or to making a medical diagnosis.”

The provisions settle how to classify the supplement which, at the same time, fulfills the criteria of a medicinal product. In such a case it is referred to as a medicinal product.

Disputes on which category a specific product belongs to, i.e. foodstuff or medicinal products, were also resolved by the Supreme Administrative Court before the entry into force of the regulations currently in force. In the judgement of 26 October 1995, Ref. I SA 753/94, OSP 1996, vol.1, item 18, the Court ordered that “The herbalist guide indicates that various herbal blends (...) cure the whole range of diseases such as

cancer, multiple sclerosis, hypertension, duodenal ulcer and others. There must be no doubt that if the discussed herbal blends have medical properties stated by the manufacturer, they should not be ingested freely by healthy individuals. Therefore, these sets cannot be declared, as the plaintiff wish, herbal teas for general use but drugs.” The judgement of the Voivodeship Administrative Court in Lodz of 4 September 2007, Ref. III SA/LD 56/06, LEX, No 914685, is dedicated to the problem of avoiding the regulations of pharmaceutical legislation, even more restrictive than AFN. Among others, the Court declared that the introduction by the manufacturer on the market (...), as a dietary supplement, with identical composition quantities, active substances that occur in the medicinal product (...) would aim at circumventing the provisions of the Act – The Pharmaceutical Law and it would violate the provisions of the Act on health conditions of food and nutrition”. In accordance with Art. 2 p. 32 of the Act – the Pharmaceutical Law, the medicinal product is: a substance or mixture of substances, presented as having properties for preventing or treating diseases in human beings or animals or given to make a diagnosis or to restore, correct or modify physiological functions of a human body by pharmacological, immunological or metabolic impact. To introduce a medicinal product on the market there is required the decision of the President of the Office of Medicinal Products, Medical Devices and Biocides. Launching on the market takes place after the decision has been rendered. The permit is issued with a time limit for the period of five years and can be extended on the basis of the documentation for the period of another five years or without a time limit.

The entity operating on the food market that introduces a food supplement on the market is required to notify the Chief Sanitary Inspector on the planned marketing and present the label model. A food supplement is implemented without the decisions of the Bodies. An easier implementation of food supplements than medicinal products brings about that there may occur the attempts to circumvent the provisions on medicinal products and to implement them as food supplements.

## **Conclusions**

Consumer safety is provided not only by appropriate legal regulations. The provisions of both the EU and Polish law concerning food safety are rather extensive. They, among others, regulate the issues of food labeling, authorized food additives used in its production, the food coming from genetically modified products or organic food. “Despite the attempts to strengthen the EU food safety system and the early warning system, there are still accidents which may have negative impact on consumers’ health. There can be listed the use of counterfeited dried eggs in food production or the use of contaminated sodium chloride for the production of meats in Poland. These situations adversely affect the consumers’ trust in food and the institutions supervising production and the legislation” (Leśkiewicz., 2012, p.181). It is necessary not only to introduce but, most of all, to apply these provisions correctly to make them fulfill their role and secure consumers against the consumption of food posing a threat to human life and health.

Rigorous adherence to the regulations of the food law is one of the factors influencing the improvement in food safety in Poland. According to the latest update of the World Food Security Index (<http://foodsecurityindex.eiu.com>), Poland is one of the four European countries where food safety increased. Poland occupies the 28th position in the world and is in the group of the countries that achieved the best results in the World Food Security Index, developed at the commission of the DuPont company. In 2015, Poland received 74.2 points out of 100, obtaining 0.5 point more, compared to the previous year. The fall from the 26<sup>th</sup> to the 28<sup>th</sup> position was caused by an increase in food safety in other countries that obtained higher score. In the ranking of the European countries, Poland fell from the 16<sup>th</sup> to the 17<sup>th</sup> position. Ireland, with 85.4 points, and Austria, with 85.1 points, achieved the best results. Poland mostly improved its score in the area of the access to food. The score in here increased from 66.3 points last year to 70 points at present, by means of which the country occupies the 25<sup>th</sup> position in the world in this category. Referring to the food price accessibility, Poland fell from the 27<sup>th</sup> to the 28<sup>th</sup> position in spite of the fact that the value of the ratio changed slightly and it amounted to 78.4 compared to 78.6 points last year.

In case of food quality and safety, the score of Poland is stable. It remained at a similar level for four years, although, now, it is slightly lower and it amounts to 75 points (less than last year by 0.7 point). In this category, Poland occupies the 27<sup>th</sup> position in the world. The highest scores (100 out of 100) were obtained by Poland in such areas as: programs supporting food security, farmers' access to finance, nutrition standards and food safety. The country also obtained high scoring for low proportion of people below the world poverty line in the country's population (99.9 points) and a small loss of food (90 points) which, when compared to the previous year, received the score better by 8.1 points.

Poland also maintained the last year improvement in scoring in the field of the share of expenditure on food in household budgets, receiving 81.8 points out of 100. Food consumption amounts to 18.5 % of the share in household expenses, as in Greece (16.2%), Slovakia (17.4%) and Hungary (17.6%). For comparison in Germany it is 11.7% and in Great Britain 9.2%.

The level of expenses for research and development in agriculture, measured by the percentage share of expenses for research and development in GDP received the lowest scoring. Poland obtained in here only 12.5 points out of 100 and the result is the same as in the last three years and twice lower than in 2012.

As far as the neighboring countries of Poland are concerned, Germany obtained 83.9 points in this year edition of the Index, which amounts to a minimum increase compared to the previous year, and maintaining the 8<sup>th</sup> position in the index. Czech Republic obtained the score of 74.9 points, which is by 0.3 point more compared to 2014 and fell from the 23<sup>rd</sup> to the 25<sup>th</sup> position. Slovakia ended in the slightly worse position since it took the 32<sup>nd</sup> place with the score of 70.7 points. (<http://www.pir.home.pl/>)

The accession of Poland to the European Union significantly affected the improvement in food safety that can be acquired in our country. This results from the duty to apply, both by food producers and distributors, and sellers, the rigorous EU standards concerning food safety. On the other hand, the common market brings about some

risks as well. The constituent of the common market – the freedom of flow of goods enables rapid movement of food between the Member States. There should be also indicated the necessity of detailed inspections of food or generally foodstuffs before allowing them on the common market in case of import from the outside of the European Union. Obviously, in case of the occurrence of threat to life and health of humans or animals there are provided the procedures restricting the free movement of food. The European Union developed the principles of close cooperation of the States in matters of food safety and the notification system for existing or possible hazards that may occur and also how to respond in the event of threats. However, the presentation of these regulations goes beyond the scope of the present paper. It should be underlined that the most perfect regulations of both the national and the EU legislation will not be sufficient unless there is awareness of the absolute necessity to follow them among all entities participating in the process of food production and distribution and also consumers.

Generally speaking, to discuss food safety, first of all, it should be established if, in the specific case, we deal with foodstuff or food supplement. Therefore, in the paper, there are presented only the definitions without the knowledge of which one cannot discuss the application of the rules of food law. The other issues ought to be the subject of further considerations.

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## **CHAPTER 2**

### **The human side of management**





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## **2.1. AGE MANAGEMENT AS AN INTEGRAL PART OF CORPORATE SOCIAL RESPONSIBILITY**

### **Summary**

The purpose of this article is to present an overview of the issues of age management as an essential and integral element of corporate social responsibility organization to employees. The implementation of the concept of age management is particularly important in terms of increasing the participation of mature workers 50 + in the labor market, from which it increasingly begins to depend on the smooth functioning of the organization. On the other hand, as companies are beginning to recognize the need to use a variety of tools exploit the potential of employees, depending on their age. The article was based on a literature review of studies of the problem and the results of secondary research.

**Keywords:** CSR, HRM, age management

### **Introduction**

In the current conditions of economic life featuring with high competitiveness and high variability of external and internal conditions, each organisation has to take various and multidirectional actions which allow it to survive and strengthen its position in the market in the long-term (strategic) approach.

The initiation of the concept of Corporate Social Responsibility (CSR) is based on sustainable and conscious actions oriented not only on the financial profit and economic aspects of the organisation but also taking into consideration the needs and requirements of various interested parties outside and inside the company (employees, shareholders, suppliers, customers, contractors or local society) in the social, ethical or ecological aspect, comprises one of such actions. Of course, initiation of the concept of Corporate Social Responsibility brings a set of benefits to the organisation which may include (Responsible Business Forum):

- Increase in the investors' interest towards the companies which try to create positive image and relations with the surroundings and connected financial credibility with social credibility;
- Increase in the consumers' and interested party's loyalty as a result of appropriate level of trust to the given company and its image;
- Increase in the competitive position as a result of creating the company image on the basis of the rules of corporate social responsibility;

- Shaping the appropriate relations with local authorities and community by taking long-term social investments aimed to root positively in the society and obtaining the acceptance of its residents;
- Shaping a positive organisation image among its employees by using different kinds of tools of motivating other than the financial one, the result of which is obtaining and keeping the best employees in the organisation;
- Shaping the appropriate organisation culture based on trust, responsibility or transparency for all interested parties.

The external dimension of the organisation, i.e. actions taken towards the organisation employees is a significantly important element of corporate social responsibility (Gadomska-Lila, 2012). The nature of these actions may be multidimensional referring to the employment and remuneration conditions, keeping balance between work and personal life, creating the employees' engagement in management of the company, shaping appropriate conditions in the scope of safety and health, education and professional development or also in the area of satisfaction and communication and supporting employees' voluntary work.

At present, the initiation of the age management in the organisation is becoming a more and more important element of actions in the scope of corporate social responsibility towards the employees.

Age management is defined as an element of human resources management and more precisely the element of managing the diversity which consists at first in the performance of various actions enabling to use human resources in companies in a more rational and effective way thanks to considering the needs and possibilities of employees at different age (Liwiński and Sztanderska, 2010b). The reasons for this are the permanent increase in the share in the labour market of mature employees, i.e. being at the age of at least 50 years (50+). What is more, the employers notice the possibility of the effective use of professional potential of the employees by using different kinds of tools from the scope of human resources management depending on the employees' age.

Age management may be considered at the level of organisation and policy of labour market. The actions in order to keep the ability to work with the consideration of permanently shaping employee's abilities are called the age management systems (Kędziora, 2010). On the basis of data referring to the Dynamics of demographic changes in the EU state it may be stated that the age group of older employees in years 2010 – 2030 will increase by about 16.2% whereas the falling tendency was shown for other age groups (40 – 54 years old – from 5.4% to 14.9% for age 25 – 39 years old). The increase in the percentage of employees 50+ is caused by the increase in the life expectancy and the fall in fertility rate (Ilmarinen, 2012).

As it results from the research carried out at the group of 1,205 surveys, the work ability index (WAI) is strongly connected with the employee's age. In this research, the respondents were to specify what their level of work ability is. It amounted to about 42.3% and 40.6% respectively for the youngest age group (to 29 years old) for both men and women, for the next group (to 39 years old) it is 41.4% and 40.5%. For persons at the age to 49 years the situation is as follows: 38.5% for men and 39.5% for women whereas in the oldest age group the difference is not big and amounts to 37.6%

for men and 37.75% for women. As it is possible to see, the ability to work (according to the respondents' answers) falls together with the surveyed person's age whereas the value of about 40% corresponds to "good ability to work" (Zus, 2014).

According to the results of the research performed by Randstad, 93% of the representatives of the tested companies employing mature workers agree with the statement that employees 50+ are precious specialists and 41% of tested companies think that their functioning efficiency benefits from employing the mature persons (Randstad, 2014). According to many specialists, the demographic changes will have a significant influence on the functioning of companies the competitiveness of which will depend on the effective use of older employees and maintaining their abilities. Thus, everybody will have contact with the problem of ageing societies but the companies, which prepare their strategies, internal procedures, and policy to the coming changes will obtain competitive advantage (Jaworska, 2010).

In Poland, similarly as in other European countries, the actions are taken which enable the introduction of solutions profitable for older employees, without limiting the chances to enter the labour market for young employees. The Union Initiative EQUAL, which is a part of the strategy of the European Union for the benefit of creating bigger number of better workplaces and providing the wide access to them, without the discrimination of potential employees, may constitute the example of it. The solutions proposed in this programme are aimed to shape the employers' and employees' awareness of the necessity to manage the age efficiently in such a way to provide the company development and maintaining the workplaces (Szmidt, 2010, Grotkowska, 2013).

### **Prerequisites of age management in the organisation**

The widespread of age management is determined with a few basic factors which may comprise (Litwiński and Sztanderska, 2010a):

- Workforce ageing – within the next 20 years the ageing and decrease in the number of employees will occur in the European Union which will determine the necessity of a new approach to the human resources management by the companies as well as the state. In connection with the fall in the number of young people entering the labour market, the employers will be forced to take actions to encourage the older persons to stay in the labour market;
- Low professional activity of older employees;
- Necessity to prevent discrimination due to age;
- Adapting to the amendments of the state policy concerning employment.

There are many prerequisites in favour of initiating age management in the organisation both from the points of view of the employee and the organisation.

From the company point of view, the age management (particularly when it comes to employees 50+) has the following advantages (Akademia Rozwoju Filantropii w Polsce):

- Increases the employees' work efficiency in the organisation by effective use of professional potential, creating good atmosphere at work, motivating or limiting the existence of generations' conflicts;
- Decreases the labour costs as a result of decreasing the employees' absence (by appropriate health prevention or adapting the work time to the employees' needs);
- Keeps the valuable employees at work, the ones possessing great experience which they may present to younger employees;
- Optimises the employment structure by stricter adapting of employee's competences to the work place;
- Decreases the employees' fluctuation and in a consequence reduces the recruitment and selection costs.

The above benefits cause the creation of the positive image of the company both in its internal and external surroundings. The organisation increases the efficiency of its functioning by creating working teams of the intergeneration nature which connect the work potential of young and elder employees. Thanks to using the variety of age (and professional experience) of the employees, the organisation possesses the intellectual capital creating the integrated structure, able to effective development and synergic work (Karpowicz, 2010).

It is also necessary not to forget about the advantages of using the age management for employees (especially the elder ones). Thanks to such actions, the employees have the possibility to satisfy their needs by obtaining incomes, social and professional development, keeping further professional and social activity at the age 50+ (also after the retirement) or at last shaping the positive feeling of their value and usefulness at the labour market and in the organisation. On the other hand, the employer should try to deepen the knowledge about elderly persons as well as to break negative stereotypes connected with their productivity, which is not easy because the domination of young, dynamic, flexible (as it refers to changes) employees who often have a negative attitude towards the work with elder people, occurs in the majority of working environments (Karpowicz, 2012).

It should be remembered that the appropriate information policy, especially as it comes to managerial staff and organisation employees, the purpose of which is at first to explain the purpose and procedures of the intended changes as well as to indicate the employees' influence on their performance, is a significant element of introducing the age management in the organisation. For this purpose, the organisation should use a few communication channels at the same time, e.g. electronic mail, Internet forums, collective brochure, employees' opinion or satisfaction polls meetings with the managerial staff and employees or communication in a form of collective negotiations (Kobus-Woszczyk, 2012).

### **Surfaces or tools of employees' age management**

Age management covers numerous surfaces within which various tools and actions may be applied. These surfaces are at first (Kędziora-Łojkowska, 2010):

- New employees' recruitment and selection;
- Trainings and development of professional career;
- Flexible forms of employment and work modernisation;
- Health care and promotion;
- Designing work places and internal moves between positions;
- Ending the employment and retirement.

The equality of elder persons in the access to vacancies, i.e. no discrimination of such persons in connection with age becomes a main assumption in the case of recruitment and selection.

It is very important due to the fact that discrimination connected with the age is a serious problem at the stage of recruitment to work. In accordance with the results of job advertisements monitoring carried out by Polish Society of Antidiscrimination Law in 2009, about 25 thousand incorrectness were noticed in over 60 thousand analysed advertisements which could lead to discrimination in employment out of which 10 per cent referred to age (Kędziora, 2010).

In order to avoid the above discrimination, the organisation may use various tools such as (Litwiński and Sztanderska, 2010a):

- Constructing competence profiles of work positions and preparing job offers on the basis of them;
- Limiting to the minimum qualification requirements in the recruitment advertisements which would exclude the persons at certain age from applying and replacing these requirements with competence requirements;
- Placing job offers in media which would reach persons at various age groups (placing recruitment advertisements also in traditional press);
- Cooperation with such recruitment and selection agencies which would guarantee no discrimination in the recruitment and selection process;
- Avoiding comments referring to the candidate's age or assessing the candidate e.g. by the competence matrix or psychometric tests during job interviews;
- Taking advantage of public programmes supporting the employment of elder persons (the example of which may be exemption from the contributions to the Labour Fund and Guaranteed Employee Benefits Fund for the first year after signing the agreement which is vesting to the companies employing a new employee at the age over 50 (Schimanek et.al, 2015)).

As it comes to the development of employees, the initiation of age management should result in providing the training for elder employees just as to the younger employees, providing the possibility to learn during the whole professional career or at last adapting the training methods to the possibilities of the elderly persons. In this scope the company make take such actions as – abolishing the limit in the access to trainings, motivating employees for further professional development, adapting training programme (methods, place and time) to the needs of employees arising from their age or their individual path of professional development and taking advantage of the

knowledge and experience of elder employees in planning and organising trainings (Litwiński and Sztanderska, 2010c).

According to the research carried out on the group of 500 employees at the age 50+ (250 women and 250 men), 20% of employees stated that they feel discriminated in their companies and only 25% of surveyed employees admitted that the trainings were addressed to them). It is worth noticing that on the basis of respondents' answers it turned out that only 20% of respondents were really encouraged to extend their knowledge (whereas about 40% of respondents indicated the trainings to extend or update their knowledge referring to the performed work, whereas the smallest number of educational events addressed to the surveyed employees was connected with the information referring to the care for health) (Hildt-Ciupińska and Bugajska, 2013).

As it comes to shaping the professional career, the age management in the company should try to support the professional career of both elder and younger employees or to increase the employees' level regarding to all employees. Performing such a strategy, the company may- recognise the employees' professional plans and adapt them to the professional career path, take advantage of the assistance of professional councillors at planning the professional career path, transfer all information about the possibilities of promotion to the employees or finally, also depend the employee's promotion on his/her efficiency or competences (and not on the age or length of work) (Litwiński and Sztanderska, 2010d).

The matters connected with the forms of employment are a significant element of programmes connected with age management in the organisation. It is tried at this surface to use flexible forms of employment which would include the changing employee's age (and at the same time would enable to join the professional work and personal life). The company may use the following actions in this scope:

- Connecting the workers' employment in the flexible forms with their needs (and not age);
- In the case of elder persons decreasing the daily or weekly period of work time;
- Gradual decrease in the work time of elder people at the age directly preceding the retirement;
- Exempting the elder persons from overtime;
- Striving to adapt the work time to the possibilities of the elderly persons individually;
- Granting the paid leaves for the elder persons according to the special rules;
- Employing the elderly persons for the limited period of time or for the time to perform certain tasks.

The promotion and health care comprise the next, important part of the age management programme, their basic objective is to optimise the work organisation towards maximising the employees' efficiency at the same time keeping their good health and ability to perform work. On the basis of the survey research conducted on the representative group of 1,138 employees from 250 companies from two age groups: the younger one (control group, 49.8% of respondents) and the older one (examined group, 50.2% of respondents), it turned out that the older employees do not differ significantly from the younger employees as it comes to the attitude to health. The answers of the majority of respondents (66-70%) indicated the so called

promotional health approach so perceiving it with the consideration of the understanding of various types of reserves, treating in as something positive and able to develop. The other respondents took the lack of disease as a concept of health, which is close to the statement “health in vacuum” used by Herzlich (Korzeniowska, 2004).

This area is important due to the fact that the possibilities of performing the work by the employee change with age, which is mainly caused by the reduction of the ability and physical fitness and some elements of psychophysical fitness. Despite the fact that the ability to work deteriorates with age, the demographic and economic factors determine the necessity to extend the period of professional activity, especially by encouraging the growing number of elder employees to stay in the employment (Bugajska et.al., 2010).

The actions in favour of this may be performed among others by monitoring the dangers in the work place and the workers’ health condition, the assessment of the worker’s ability to work on the basis on the health condition (and not age), by using the help of expert of the labour medicine, by employees’ training concerning OHS rules or taking solutions promoting the provision of the workplace ergonomics (Zawadzki, 2009).

Two last surfaces of the age management comprise the move between positions and retirements. As far as moves between positions are concerned, their causes are usually the limits of the employee’s work ability (because of the lack of competence or the health condition) or actions towards further professional development of the employee. The moves between the positions should lead to permanent maintenance or increase in the worker’s ability and in particular, as a result of extension of the competences to provide better conditions of healthcare.

Whereas ending the employment and retiring should be conditioned at first with the assessment of the employees; work productivity or level of competences (and not age including also achieving the retirement age). The company should also take into consideration the possibility to change the form of employment to the flexible form (limited time, tele-work) instead of dismissal. Other actions in this scope comprise the initiation of the outplacement programme or preparation of the employee for retirement.

## **Conclusions**

Age management as the element of social corporate responsibility towards the employees in the current conditions of the companies functioning at the market is becoming a very important element of creating the positive image of the company at the markets and the effective use of the human capital. Using this tool brings benefits both for the employee and the organisation. In the case of the employees, they obtain the possibility of personal and professional development, the maintenance of longer professional activity, satisfying the needs connected with remuneration or promotions or feeling the employment security.

In the case of organisations, the benefits of the age management comprise the effective and complex use of the potential of different workers' groups, decrease in the employees' fluctuation or absence, creation of efficient workers' team, rational planning of consequences or finally, creation of positive image of the company at the market for which the employee is not a cost but a precious resource and investment in the future.

Of course, age management in the organisation is not an easy task, and the basis of its success should be obtaining the support of the company management or all employees for this type of actions. The managerial staff should be trained in the aspect of age management, appropriate information policy should be prepared or finally, age management should be included into the development strategy of the organisation and the strategy of human resources management.

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## **2.2. ENTREPRENEURSHIP AS A PART OF THE SOCIO-CULTURAL CAPITAL IN SILESIA**

### **Summary**

This article aims to answer the question to what extent verbalized and declared entrepreneurship impact the competitiveness of the economy based on a research conducted in Silesia, Poland. In the theoretical part, entrepreneurship is pre-defined in its social meaning; this means that entrepreneurship is understood as an element of human capital. Entrepreneurship plays an important role in economic development, and one of the driving forces of entrepreneurship is the people's attitude towards these activities. The analysis which was conducted on the basis of empirical research on the economic awareness, discusses this aspect, the attitudes of different age groups towards entrepreneurship, as a possible way of working and living. The research results present the typology of the respondents due to their attitudes towards entrepreneurship based on their opinion, experiences and past or planned activities.

**Keywords:** Entrepreneurship, the socio-cultural capital, Poland, Silesia

### **Introduction**

The issue of socio-cultural capital is often undertaken by sociologists. It is uncommon for entrepreneurship to be analyzed as human capital. However, this is a very topical issue as it provides knowledge on: which environments and what social categories are economically active and which ones intend to become active in the future. Interesting environments to study are former workers environments. These are the categories and social groups, where entrepreneurship and economic activity did not have great traditions, since the workers were actually required to be diligent and obedient. The article is to answer the question of whether such an environment has used the possibilities of business development in the market economy. In addition, it will be interesting to learn what social categories have developed entrepreneurship, particularly whether it has concerned the young generation. Answers to these questions will be gathered on the basis of the analysis of empirical studies conducted in the working-class environment of Silesia. In the conclusion, types of entrepreneurship operating in former workers environments will be created.

### **Entrepreneurship as part of the socio-cultural capital**

One of the adequate concepts developed on the basis of economics and social sciences is socio-cultural capital. Two terms are related to this concept: the first refers to various forms of social bonds underlying the relation of the entity with other people and social bodies; the other evokes correlates patterns, values and meanings encoded in the cultural space of regulating life activity of the entity (Putman, 2008). In turn, the concept of cultural capital, had been interpreted very broadly, and its essence was the inclusion of a number of factors, such as education, skills, cultural traditions, aspirations, habits, customs, values, and readiness to accept change (Świątkiewicz, 2000).

Entrepreneurship as one of the elements of the socio-cultural capital is also embraced within this definition (Drucker 1992). The classical theory of entrepreneurship was developed and perpetuated in the literature by Schumpeter, who saw the entrepreneur as a person characterized by creative activity involving the implementation of new concepts (Schumpeter 1962). In the presented characteristic of an entrepreneurial person made by Schumpeter, focus on the changes that are treated as a natural attribute of the person's actions.

Entrepreneurship is directly connected with the entrepreneur. It may be understood as "a willingness and ability to solve new problems in a creative and innovative way, the ability to exploit emerging opportunities and prospects, and flexibility to adapt to new conditions" (Kwarcieńska – Kwarcieński, 2004).

Entrepreneurship can also be understood as the ability to create an enterprise and acting in the direction of its development through the appropriate organization, management and introduction of new technologies (Piecuch, 2010). Such characteristics can be classified as socio-cultural capital. The activity towards creating one's own business, creativity, willingness to take risks and actions are the capital, which contributes to improving the competitiveness of the economy. Entrepreneurship and economic activity enable efficient functioning of the economy, facilitate their development and expansion, and make the company, and thus the economy, more competitive. The increase in competitiveness depends therefore, on the socio-cultural capital of which entrepreneurship is an important element.

### **Evaluation of respondents' activity**

The applications presented below are based on sociological research. The concept of research was related to „economic awareness of residents of the former industrial region”. The competitiveness of the economy is dependent on the activity of at least some people, manifested in the creation of companies and businesses. Not all people have predispositions or are suited to the task.

An entrepreneur person can be distinguished by several features such as dynamism and activity, the willingness to take risks, diligence, the use of emerging opportunities, and mobilization in difficult conditions. Through sociological studies, answers to whether

certain social categories or communities manifest entrepreneurial attitudes can be found.

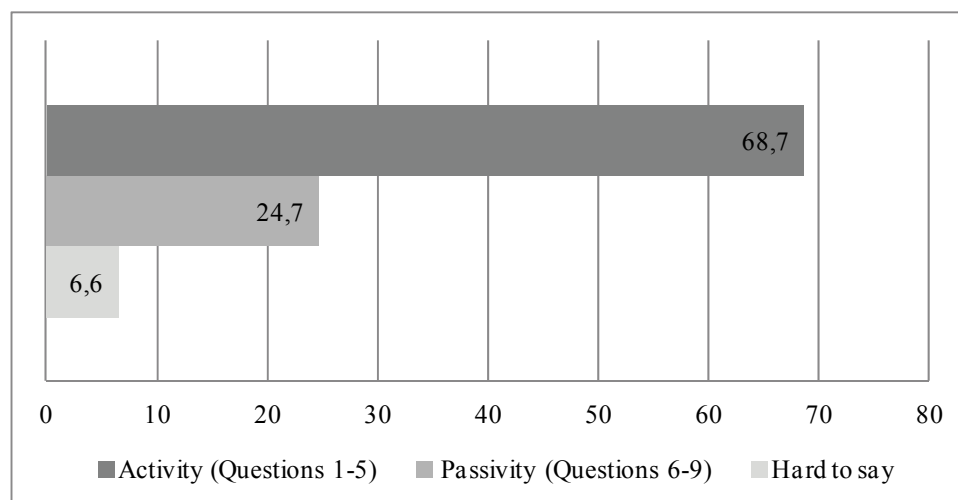
By studying former workers' communities the following question was used: „Which of the following sentences characterizes you and your attitude?”. Table 1 shows the responses to this question.

**Table 1: A sentence that best characterizes the attitude of respondents in connection with entrepreneurship (%) N = 255**

Answers	Age of the respondent						Total
	18-24	25-30	31-40	41-50	51-60	61 and more	
1. When I plan something, I usually manage to realize it	9,1	7,0	15,7	10,6	8,5	6,5	10,2
2. I like new challenges in life	18,2	16,3	11,8	10,6	6,4	6,5	11,0
3. I believe that every person can achieve success in life	4,5	7,0	11,8	8,5	12,8	35,5	12,2
4. I believe that my future depends on me	27,3	23,3	25,5	19,1	6,4	16,1	18,4
5. In difficult situations I motivate myself and try to cope on my own	9,1	20,9	15,7	27,7	12,8	6,5	16,9
6. If I fail, I don't make further attempts to achieve my goals	4,5	4,7	0,0	0,0	2,1	0,0	2,4
7. I avoid difficult situations, even if it means that I will achieve less	0,0	4,7	2,0	4,3	12,8	6,5	5,5
8. I often start something, but later feel discouraged and give up	18,2	9,3	9,8	4,3	10,6	0,0	7,8
9. I believe that in difficult situations, I am entitled to help from the state	4,5	4,7	3,9	8,5	17,0	12,9	9,0
10. Hard to say	4,5	2,3	3,9	6,4	10,6	9,7	6,7

Source: Own research and calculations

The above theorem can be divided into two groups. A selection of one of the first five (1-5) indicates activity and entrepreneurship, a selection of one of the following four (6-9) indicates the passivity. Almost 70% of respondents chose one of the first five options (Figure 1.).

**Figure 1: Activity and passivity of respondents based on questionnaire (%) N=255**

Source: Own research

As it is shown in Table 1, respondents chose most often this option: „I believe that my future depends on me” (18.4%), it is followed by: „In difficult situations, I mobilize and try to cope on my own”. Two of the possibilities no. 1 and no. 2, which evidence entrepreneurship the most, were chosen by more than 1/5 of respondents (21.2%). Such a high proportion of entrepreneurial people is a good predictor for economic development.

What are the answers of individual age groups, especially young people? First of all, the younger age categories chose the option: „I believe my future belongs to me” (about ¼ of responds). A relatively large proportion of young people under 30 years of age chose the possibility: „I like new challenges in life” (18.2% in the age category 18-24 years, 16.3% in the age category 25-30 years). This is very optimistic news as it shows that among young people there is a group of very active people. Unfortunately, the same percentage of young people aged 18-24 chose the answer: „It often happens to me that I start something, but later I feel discouraged and give up”. The surveyed young people are therefore very polarized in their attitudes.

This is evident when one analyses the next factor - education. The biggest differences apply to answer no. 2: „I like new challenges in life” (elementary education – 2.5%, basic vocational education - 7.5%, secondary education - 13.2%, higher education - 20.5%). People with higher education often chose the first five possibilities of answers (higher education - 77.4%, elementary education - 47.5%), and it particularly concerned young people (84.6%). People with elementary education were more likely to choose a possibility of 6-9 as well as „hard to say” (elementary - 52.5%, higher - 22.7%). The presented analysis shows that age and education both influence the assessment of one’s own entrepreneurship. In workers communities, the educated young generation is optimistic about the ability to succeed, seeing career opportunities in their own activity and entrepreneurship.

In conducting research on the economical awareness, including entrepreneurship, the question about the assessment of people’s suitability to running their own business was

asked. Respondents gave the following answers: definitely yes - 11.4%, rather yes - 31.5%, probably not - 29.5%, definitely not - 15.4%. This means that more than 40.0% of the respondents positively assessed their own abilities to start a business. The most confident about their own skills are people with secondary education (definitely yes - 17.6%, rather yes - 36.3%), a slightly lower assessment of skills was presented by respondents with higher education (definitely yes - 13.6%, rather yes - 25.0%) and vocational education (definitely yes - 8.8%, rather yes - 32.5%). A very low assessment of their own suitability was shown by people with elementary education (definitely yes - 0.0%, rather yes - 6.3%).

The analysis shows that, above all, young people and middle-aged people to 40 years of age evaluate their suitability for self-employment very positively. About a quarter of them believe to possess the appropriate skills (25-30 years of age: definitely yes - 16.3%, rather yes - 15.7%; 31-40 years of age: definitely yes - 41.9%, rather yes - 33.3%). Among older generations there was a decrease in self-believe. What may be the reason for such a big difference? First of all, the older generation is professionally stabilized and if someone did not set up their own business, but only worked in companies or public and private institutions, it is unlikely this person would want to take the risk in an older age. Secondly, the older generation grew up in a period of real socialism, where self-employment was limited. Therefore, they were unable to socialize to taking this kind of risk and did not have the possibility to verify whether or not they possess this type of predisposition. The young generation, socialized in the spirit of entrepreneurship and activation and is not afraid to evaluate their skills and aptitudes.

### **The realities and plans for one's own business**

Suitability to economic activity does not always translate into running one's own business. In addition to favourable external conditions, a business idea, market knowledge and gaps in the existing market, own resources, determination and courage are needed. Therefore, two questions were asked, the first one: concerning the location and nature of the work which the respondent would like to take, and the second one: taking into account the possibility of establishing one's own business. It turned out that as many as 38.1% of respondents wanted to be self-employed, 45.5% would like to work in the state workplace, 7.1% want to work in a private company, 3.1% - go abroad, and 6.2% do not want to work at all. The results are consistent with the results of nationwide research but a slightly larger proportion of respondents would like to work in the state workplace (Skrzeszewski, 2014).

Self-employment as a rule was chosen by the young people and middle-aged people to 40 years of age. These are people who grew up in a market economy when the possibility of running one's own business was already available. The older generation whose youth fell in the period of real socialism, preferred to work in state workplaces. Among the youngest it was also attractive to work in a private company. This can be explained by higher earnings than in the state workplaces. Changes in trends when it comes to choosing the type of work can also be noticed. Several years ago among

workers' communities, work in state workplaces was preferred and far smaller interest in own economic activity was shown (Swadźba, 2001).

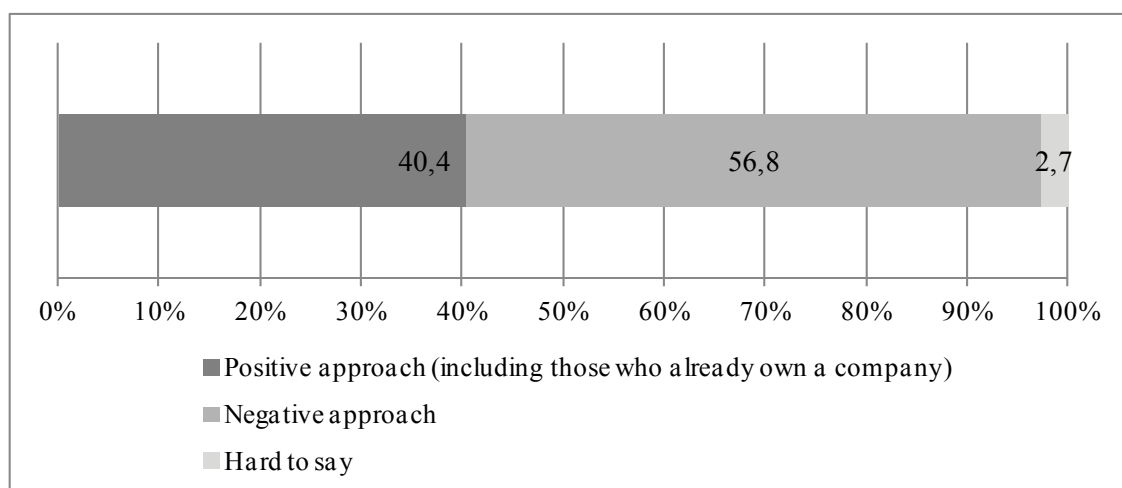
There are also correlations regarding education. Most likely to work „on their own” are people with secondary education (45.5%), especially men with a technical education. These are people who already have some experience and believe in their own abilities. In contrast, a much lower proportion of respondents with higher education preferred the conduct own business (25.5%).

People with higher education often chose the opportunity to work in a state or local workplace (61.1%). This situation particularly concerned women, as indicated by other sociological studies (Boguszewski, 2014). The willingness to work in a specific company, always remains in the realm of projects and refers to unspecified plans. These plans do not always come true. This is often due to the external constraints, the lack of jobs in the company or institution. Added to this are internal factors, like the lack of resources to develop one's own business or the lack of qualification for employment in the job.

Sociological studies show how often career aspirations fail to comply with the realities of the labour market. Accordingly, to investigate whether or not self-employment and economic activity are just in a sphere of dreams or concrete plans, the question about life plans was asked, which take self-employment into account. Below are the answers to the second question in correlation with education.

The approach of the respondents about entrepreneurship is illustrated by Figure. 2, which shows that there is a definite aversion towards entrepreneurship.

**Figure 2: Respondents' approach towards entrepreneurship (%)**



Source: own research

The approach towards entrepreneurship was evaluated by the following questions of in the questionnaire described in Table 2.



**Table 2: Do you take into consideration in your life plans the possibility of starting self-employment, creating your own business (%), N=255**

Answers	Education of the respondent				Total
	Primary	Basic vocational	Secondary	Higher	
I already own (co-own) a private business	5,0	7,5	19,8	9,1	11,8
I want to soon start my own company	2,5	2,5	0,0	4,5	2,0
I'm thinking of starting my own business in the future	2,5	13,8	15,4	20,5	13,7
I have thought about it, but have not decided	10,0	16,3	15,4	4,5	12,9
I have never given it much thought	27,5	31,3	23,1	22,7	26,3
I do not take this into account in my plans for life	42,5	25,0	25,3	25,0	27,8
I had my own company and do not intend to assume the next one	2,5	0,0	1,1	11,4	2,7
Other possibilities, it is difficult to say	7,5	3,8	0,0	2,3	2,7

Source: Own research and calculations.

The research results show that more than half of the respondents never thought about starting their own business, or does not take this into account in their life plans.

Slightly less than half of the respondents have thought of starting their own business, but decided not to, and slightly higher proportion of people thinks of starting a business in the future. A relatively high proportion of respondents (11.8%), already owns their companies, they mostly have secondary education. A low percentage of respondents has already had a business and do not intend to assume the next one in the future ("I had my own company and do not intend to assume the next one"). Perhaps this is due to bad experiences, and perhaps it is a result of poor skills. However, often these people hold a higher education degree. One can therefore deduce that higher education has not been matched with the skills of running a business.

To which social categories do the entrepreneurial people and those already leading their own businesses belong to? These are mainly people with secondary education (almost 20% of the respondents). Primarily graduate technicians decide to run their own businesses, after several years of work and gathering of experience. Lower by about a half is the proportion of people with higher education. The next influencing feature is gender. Definitely more business owners are men (14.3%) than women (9.4%). Age is also a decisive premise. Business owners are mostly people between 30 and 50 years of age (31-40 - 30.5%, 41-50 - 14.9%).

An overrepresentation of young people up to 40 years of age occurs. This means that the socialization of the young generation in a market economy brings certain results. The young generation, particularly men, is not afraid of entrepreneurship and economic activity. Overrepresentation of people with a secondary education may also result from the nature of the environment in which the study was conducted - former

and current workers districts, where this category of citizens prevails. This is particularly true in case of Giszowiec, inhabited by workers employed in mines. A slightly lower percentage of people with higher education have their own businesses (9.1%). They are also the most commonly men at a younger age. This category of respondents has more specific plans for the development of their own economic activity. In the nearest future 4.5% of respondents intend to undertake this type of activity. Almost all people with their own businesses believe that they have predispositions to such activity (definitely yes - 46.7%, rather yes - 43.3%). It is a good omen for competitiveness and economic growth as it means that active people fulfil themselves in their professions and succeed.

Also, a relatively high percentage of respondents (13.2%) plan to start their own business in the future. Are there differences in responses between different social categories? People with higher education most often think about starting their own business in the future (1/5 of them have such plans). Primarily young people have 'starting a business' in their life plans (up to 37.2% of people aged 18-24, 27.3% of people aged 25-30 and 15.7% of those aged 31-40 years). As a general rule, young people assume that it is possible to change career plans several times in order to find the right place and settle down (Boguszewski, 2013).

What is surprising, there is no gender difference when it comes to the answer to this question. Almost the same proportion of women and men has such life plans for the future. This means that, first of all, young women do not feel complexes when it comes to their skills and plans for their own economic activity. However, when analysing in more detail the differences between the desire of economic activity for men and women, one can see some distinctions. Women want to become economically active slightly later than men. At the age of 18-24 years, a higher proportion of men already plan to set up a business (M - 37.5%, F - 21.4%), while in case of women such plans only develop at the age of 25-30 years (M - 33.3%, F - 40.0%). In the age category of 31-40 years such plans are held by only 7.7% of women and 24.0% of men. What may cause such an age diversity of plans? Probably the fact, that women often undertake studies, and only after graduation do they plan to take such a risk. Men set up their companies already in college, and some of them encouraged by the example of their peers plan such activity for the nearest future. It should be noted, however, that young women present the same level of economic activity as men, and due to the fact that they are better educated, it presages well for the future. Sociological studies show the current situation to be more conducive to entrepreneurial people, and people with an idea and the energy, supply the sector of private enterprises (Kowalczyk, 2013).

What is interesting, people who plan to start their own business do not always assess their suitability for this kind of project properly. Only 20.7% of them evaluated it positively and answered "definitely yes", and 23.3% - "rather yes". It is not a good omen for providing business skills for the future business owners. However, it can be assumed that as a rule those are young people, therefore they will still manage to prepare for such activity.

The respondents in the older age categories most often do not think about taking such life activity (over 30% of responses). This is particularly true in relation to women with primary education, but also with secondary or higher. Such categories of

respondents are very reluctant to undertake economic activity. It also derives from the fact that middle and the older generations are professionally stabilized and if not forced by the external factors, they do not want to change the existing situation. Careers and activity are implemented in the workplace. But what is interesting, very young women, of less than 24 years of age, also do not think about starting a business. Perhaps this is due to the fact that they rather think about undertaking studies or graduation, and finding a job in the public or private sector. Only then, after graduation in the face of the reality of the labour market, would they change their minds on this issue.

### Conclusions

The analysis of studies carried out in a fairly homogeneous environment, allows for a number of generalizations and conclusions to be made. Generalizations in fact allow for identifying several types of entrepreneurship in the Polish society. The main criterion for distinction, is the ratio of economic activity and age, however gender and education must also be taken into account. The different groups according to their attitudes towards entrepreneurship in the Polish society are as follows:

- 1) *Active*: The entrepreneurs, self-employed, young and middle aged, mostly men with secondary education. Those people are confident about their predispositions for running a business and succeed in this field.
- 2) *Resilient*: People who only plan economic activity, without specified plans. They are not afraid of new challenges and activities. This type includes young people, slightly more often young men, especially up to 25 years of age and women slightly older than men (25-30 years of age). In the case of the young men, they have completed high school, often still studying, while women belong to the post-graduation group. For now, they do not assess their suitability for business planning positively, however considering their young age, they still have time to improve the necessary skills. This is a group that demonstrates a high level of entrepreneurship. People, who were socialized in times of market economy, consider their own economic activity as a natural career path.
- 3) *Conservative*: People in the younger and middle age categories, more often women. They completed higher education and do not consider economic activity in their life plans. They are reluctant to take up new challenges, and therefore often look for a stable job in the public sectors. They assess their suitability to run business poorly and therefore do not take this into account in their life plans.
- 4) *Stabilized*: People in the middle and old age categories, of both genders and various levels of education. They have achieved professional stabilization and succeeded in varying degrees. Those people rather do not consider any changes in this situation and do not intend to demonstrate entrepreneurship. Only external factors, such as job loss, change in the family situation, sometimes force them to undertake economic activity. These are the people who partially lived their lives in the period of real socialism.
- 5) *Retreated*: Older people of both genders, ending their professional career or already retired. Their youth and significant part of economic activity fell in the

period of real socialism; therefore they were never socialized to develop their own economic activity.

Economic development is not only conditioned by legal, political, technological and financial issues, but also by the actions of individuals, their activity and entrepreneurship. The conducted analyses indicate that some members of the former working-class communities manifest entrepreneurship and implement it in their lives by setting up their own businesses. This potential mainly lies in the young generation, socialized in a market economy. Creativity and entrepreneurship of the young generation of former working class communities are important predictors for the development of the region.

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## 2.3. ETHICAL ASPECTS OF NEGOTIATIONS

### Summary

Probably because of the egoism and the divergence of interests, people are forced to fight for their corner. It is happening on different plains of the social life, beginning with family, through colleagues' relations, friendship relation and social as well to finish with professional. Therefore it can be said that the negotiations are an indispensable part of our lives.

In organizational disputes, managers negotiate conditions of cooperation with other business entities, employees establish the amount of their wages with the employer, circle the scope of their duties and responsibilities and etc. The interests of individuals or social and professional groups are often represented by the third party (ie. the negotiators) such as organizations as well as trade unions representatives.

Negotiation skills are crucial for establishing business contacts, make new collaborations or maintain already taken business relations.

In practice, the art of negotiation uses a wide range of techniques to help negotiators to achieve the intended purpose. However, some of these techniques raise ethical questions.

The premise of this paper is not willingness of a negative assessment of the strategies adopted by the negotiators, but to show that perspective of the objective of the organization existence is not only to maximize profits for the company owner but social responsibility (ethics) as well. Moral dilemmas and unethical choices which negotiators faced often carry implications acting destructively both in relation to the company's environment (eg. contractors, collaborators) for further relationship with the deceived person or subject of negotiations, as well as in relation to the image and conscience of unfair negotiators.

**Keywords:** manager, ethics, negotiation

### Characteristics of the term and areas of negotiation ethics

Negotiations are nowadays a very common practice, concerning all the people and all aspects of social life. We constantly need something that belongs to somebody else, or we compete about something.

Negotiation is “ a two-side process of communication, the aim of which is to achieve an agreement, when at least some of the interests of people involved are confrontational” (Fisher et al., 1990). The starting point for negotiations is always conflict, which is „ perceived as the cash of different, but interdependent interests” (Mastenbroek, 1998). Therefore, the interdependence of interests (at least one common goal) (Zbiegień-Maciąg, 2003) is the basis for negotiations. They aim to find

compromise, thanks to which the interests of both sides could be realized, without harm for any of the parties, with simultaneous maximization of profits earned from this cooperation.

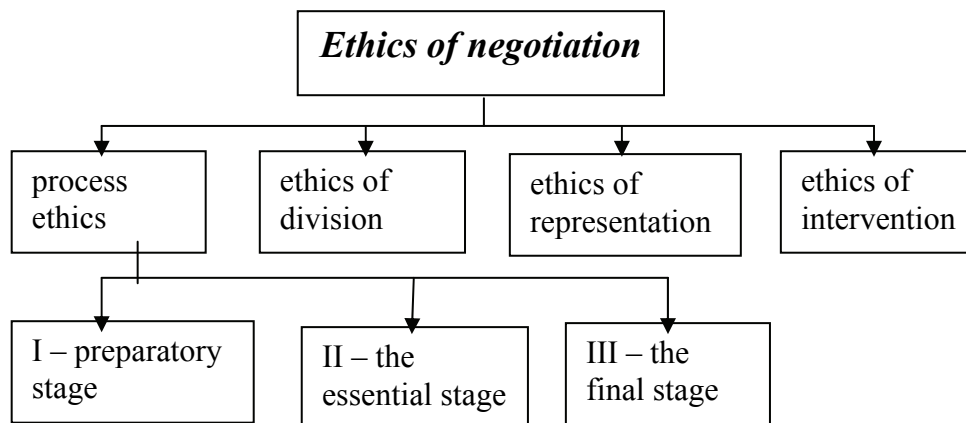
Negotiation constitute a different situations from those, where parties are obliged strictly to obide certain external rules. Negotiative practice includes such practices like elevation of the first offer price, which cannot be really considered in terms of morality. Specification and obedience to the rules is completely up to the negotiating parties, not to any external subject, which could impose any sanctions for failure to meet the rules. Should one of the parties break the rules, the second will always see this as something wrong. We should stress however, that some of the negotiative behaviors are very hard to estimate, still we need to consider opinions of all the parties. (Kałużna-Drewińska, 2006)

Focusing on moral issues connected with negotiations, are the basis for extracting from the area of business ethics a category called negotiation ethics. The assumptions of this sub- discipline include both elements of descriptive ethics and normative ethics, both with reference to description of believes and moral behaviors of people as well as stating, what is good and what is wrong in negotiations. (Kamiński, 2007)

Ethical is considered all, which does not contradict moral, legal or social norms. (Kałużna-Drewińska, 2006)

The main areas of interests in case of ethics are: process ethics (I – preparatory stage, II – the essential stage, III – the final stage); ethics of division, ethics of representation, ethics of representation, ethics of intervention. (Kamiński, 2003)

**Figure 1: Ethics of negotiation – main interest areas**



Source: J. Kamiński, negotiation in business. How it is done by organizations, PWE, Warsaw, 2003.

Process ethics is focused on the negotiation flow in various stages: preparatory, essential and final stages.

In the preparatory stage it is common to have contact with moral aspects right while skating the goals. It is possible to endeavor to reach somebody's own goals, or take into account the interest of the other party. Moral aspects in this stage are i. a. the way of getting and using information about the company, negotiators and company

surroundings. Moreover, the discussed stage is for preparing of the climate for negotiations, that would influence both parties of negotiation. (Kałużna-Drewińska, 2006)

In the Essential stage the most important aspects are the following ethical issues: beginning of the proceedings and preparing of the first offer, a type and way of making concessions, order of discussed problems, discussion, type of the questions asked, manipulation of information, using the techniques of influencing others, formulating and signing of a contract. What brings the ethical doubts in the discussed stage of negotiations is the aspect of choosing the correct tactics.

Ethics of the final stage is connected with evaluation of an effect of the negotiation and monitoring of the contract realization.

Ethics of division – stating, whether the result of negotiations is fair, and to which assessment criteria it should undergo.

Ethics of representation – originates from the fact of representation of a party in a negotiation process, e. g. by the agents, lawyers, trainers, psychologists, etc. and resulting problems of moral nature on the line: negotiator- represented person.

Ethics of intervention – is focused on the analysis of the norms and rules of behavior of a mediator, a person that is asked by the negotiating party for help, when they cannot communicate.

### **Symptoms of immoral behaviors in negotiations – manipulation and lie**

The original division of negotiation includes hard and soft negotiation. The former are oriented on strengthening cooperation, obtaining satisfactory agreement and avoiding conflicts. They are opposite to the, so called, hard ones, which mainly focus on competition, tension between the parties, using manipulation as an often tool. (Reimus, 2005)

There is also another division of negotiation styles, such as: domination – striving to promote one's own aims at cost of the other party's ones; adaptation – aware giving up one's own aims to support the objectives of the other party, in order to maintain good relationships; avoiding – avoiding any actions, which is based on knowledge, that advantages achievable are not lower than the costs of negotiation; compromise – based on assumption, that negotiation process makes everybody lose something, in order to win something; integrative negotiation – the aim is to work out the agreement creating a new quality useful for both parties. (See further details at [http://negocjacje.genialne.info/style\\_negocjacji.html](http://negocjacje.genialne.info/style_negocjacji.html) - odczyt 12.09.2015)

In the books about negotiation, the techniques described as „ethically doubtful” are the ones which include conscious deception, false statements or twisting facts. (Zbiegień-Maciąg, 2003) There are techniques, however, which leave no doubt as above, still including manipulation to some extent (misguiding the receiver). These techniques based mainly on disinformation and emotions, and they are, i.a.:

- good man – *bad man* - skillful playing roles within one negotiative team. One part of it represents tough position and rejects any compromise; the second one is softer in negotiation, tending to calm down the arguments of the tough part. In

- other words, the negotiators fake the conflict inside the team, convincing this way, that the nicer part's proposal is the best one can get;
- *provocator* – a special role aimed at weakening one of the parties, by making them lose control of their emotions. The provocator may use sarcasm, arrogant behavior etc, in order to keep the negotiators focus on controlling their own emotions, preparing retorts or saving their faces instead of concentrating on the problems. This certainly does not help in constructive discussion.
  - *persuasive manipulation* - this leads to omission of some points in negotiation, in a way convenient for the manipulator. The manipulator may behave joyfully, belittling or exaggerating the problems, focusing on irrelevant details or breaking the argumentation with pseudo-rational arguments, like: „that's obvious, why do we need to discuss it at all?”. These practices distract the partners, drawing their attention from one's incompetence or weakness. (Zbiegień-Maciąg, 2003)

We can repeat after Mastenbroek, that „the general rule in negotiation is emotional balance” (Mastenbroek, 1998). A skillful negotiator can control one's emotions, still not by choking them back, or blocking. One is aware of one's reactions, in a way, which makes one's partners understand, that the emotions are controlled, not the other way around. (Fowler 2001)

Ethics of negotiation is focused on various areas, one of the key of them is identification of the symptoms of non-ethical behaviors in a negotiation process. Next, in this process ethics of tactics is extracted (problem of manipulating) and the area called conventionally ethics of false statements (problem of lie). Negotiation tactics aim is to focus our attention to the fact that apart from cooperation and setting goals, apart from tactics cooperation- oriented, there also the ways often using cheating. Therefore, under the above mentioned areas, ethics will be focused on grouping the tactics and statements with similar bases, and next their moral assessment.

Manipulation is „a group of psychological, propaganda, organizational activities, (...) calculated on effecting particular social and individual behaviors” (Reimus, 2005).

Manipulation is a planned (aimed) and covert activity (which basically decides of its efficiency). Manipulative negotiation forces a person, or a group to accept a false image of specific reality. (Hogan-Speakman, 2009)

During negotiations one can try the following methods of manipulation:

- *involving negotiation place* – it is based on creating negotiation climate. The negotiation may be organized in dark, isolated places, which is not helpful in obtaining agreement, or in perfect, relaxing conditions, which makes conversation easier and helps to achieve compromise. Uncomfortable chairs, no room for notes, locating negotiation in remote resorts, often phonecalls – these are the tools of a resourceful manipulator to achieve success;
- *personal or emotional manipulation* (por. L. Cichobłaziński, 2013) – this is the most popular manipulation technique. The manipulator starts a psychological fight on purpose in order to make the negotiators abandon rational arguments and identify themselves with the problems. Classic examples are:
  - a) „let us love” technique - consists in convincing the opponent of one's friendship, based on common education or career history, which makes the agreement almost obligatory,



- b) cyclical technique – giving high demands in order to change one's attitude radically in the next step. It distracts the opponent and makes him more likely to agree for seemingly irrelevant concession.
- c) breaking negotiation – the toughest form of manipulation. This movement is so radical, that, if the negotiation is restarted, the other party is desperate to make an agreement, fearing the situation may repeat itself.
- d) personal attack – another form of personal manipulation, used when one of the parties loses its position in substantial argumentation. Then one usually uses the argument of force. Breaking the rule of emotional and personal neutrality, one starts to accuse and discredit the opponents;
- *manipulation with problems* – this is used when large problems resolvance is highly unlikely. Then using the baby steps method one tries to resolve the big problem inch by inch;
- *manipulation with information* – this consists in creating an impression of a well informed person. This evokes respect and has impact on negotiation and its results. This may be only a bluff, which may be easily verified by asking specific questions. Another tactic of this kind is using public surveys. Even though such research needs to be representative, they may be easily used for manipulation by using a group of respondents answering the way we expect them to do. (Reimus, 2005)

We must remember, that the manipulator's priority is to conclude a favorable contract. Persons aware of being treated with dishonest methods will react with counterattack, breaking the negotiation or concession. The first reaction leads to the conflict escalation, which jeopardizes the process of negotiation. Breaking the negotiation is a luxury of those who have a better alternative, and concession is usually the most expected move by the other party. We submit to the opponent's version in order to end the unpleasant situation.

In the literature of a given subject there functions many divisions of the manipulation tactics while negotiating, often very extender. (E. g.

<http://katarzynaksiazkiewicz.pl/manipulacja-przewodnik-po-technikach-manipulacyjnych-2/>)

Nevertheless, because of the ethical character of the following article, the focus was placed only on the selected examples.

Among the most unpleasant and standing beyond the law tricks and ethically dubious tactics we may distinguish:

1. The use of gifts, parties and other kind of „bribes” in order to „soften” the position of the other person;
2. Using a group of „spies” in order to get some special information concerning plans of the other party, mainly concerning established in the point of resistance.
3. Undermining the credibility of a negotiator in front of the board members of his company by using various types of lies;
4. Using various forms of electronic monitoring and heating ( the office of the negotiator, of changing the meetings of the board of directors);
5. Stealing the documents belonging to the opponent, or gaining information from the spys;

Discreditation or diminishing of the opponents by using public slanders, etc.

(<http://conradinstitute.org/index.php/rola-prawa-i-etyki-w-prowadzeniu-negocjacji/>)

Other division of the manipulation tactics will be the one because of:

1. Pressure tactics, which is movements and behaviors, the aim of which is to cause that only one party gives up;
2. Diversion tactics, that are based on the belief, that the negotiator acts according his good belief;
3. Tactics of the psychological war, aiming to cause that the other party of negotiations feels uncomfortably (e.g. too loud, too cold, lack of possibility of consultation, verbal and non-verbal communication causing that the other person feels sorry, and threat), by means of what will be more prone to concession, because its aim is to finish the negotiations as soon as possible. (Fisher et al.. 1990)

Only on the basis of the above mentioned divisions of manipulation tactics it may be concluded that the subject includes many various behaviors, which means from extremely immoral, according to the rule „after corpses for purpose”, or „purpose sanctifies means”, to the less drastic. It is not possible to have them morally assessed according the same criterion (it is, if the observer is a Kantian).

A lie has different form in a process of negotiation. The most common division is the one that distinguishes:

- not full showing the position, which means hiding the point to which the negotiator aims (usually claims, that he would like to achieve more, in order to get what he wants);
- niepełne ujawnianie pozycji, czyli zatajanie punktu do którego zmierza negocjator (zazwyczaj mówi, że chce osiągnąć więcej, aby osiągnąć to czego chce);
- lie, based on cheating being an effect of signaling intentions of taking a specific action, although in fact it is not true;
- falsification, refers to the purposeful activities of a negotiator, thanks to which by means of a set of real and unreal arguments lead the other party to false conclusions;
- cheating, is the least sophisticated, among all the forms of lies, based on introducing to negotiations mistaken, false information in order to destroy decisive process of the other party of negotiations.

Ethicists highlight not to confused the above mentioned forms of lies with selective expressing information represented by the parties about the flow of negotiations, because it belongs to the art of negotiating.

### **Ethical negotiations**

Recently, in the environment of the specialists from the area of negotiations there is more popular point of view that effective negotiator is an ethical negotiator. Nevertheless such a general expression needs to be specified, what is meant by using the word “ethical”. The negotiators use in their work various types of tactics and

techniques that are not always in accordance with the ethical rules. Using i. a. lies, inflating the price, illegal tricks, caused that discussed professional group does not have even good opinion. According to the common opinion there functions a stereotype that negotiator is a person you cannot trust and that is why that person should be constantly carefully observed and listened. Negotiator, in order to be considered as ethical, has to meet several conditions:

- respect your partner,
- reliability – clear intentions for co-workers and the other party, - well-understanding among the members of negotiation teams,
- responsibility for words,
- equal right to the utterance – there should be given to the partner the possibility to present his own point of view,
- reciprocity in a process of negotiation – when one party resigns, the second party should lower its claims proportionally (if possible),
- so called „good manners”– it may be helpful to use diplomatic protocol, as well as ethical code (Rosińska, 2007)

Moreover, negotiator meeting the above mentioned conditions, has the ability to use many techniques that may be used while performing his professional duties. Not all of them are ethically recommended, what should be also taken into account while assessing ethically the work of negotiators.

It should be also taken into account that ethical negotiations should aim to make the agreement probable at the level – the won- the won. Many negotiators make a mistake focusing on the essential aspect of a discussion, removing to the second plan the procedure of resolving the conflict itself. (Fisher et al.. 1990) Correctly organized procedure should be composed of several stages: defining of a problem, looking for an alternative solution and choosing of the best solution. [According to the number of stages the authors are agreed: In terms of the number of stages, the researchers are not unanimous: compare D. Dana, *Rozwiązywanie konfliktów*, PWE, Warszawa 1993 (4 stages/steps); and *Negocjowanie metodą interesów*, J.P. Gieorgicy [ed.], Centrum Partnerstwa Społecznego Dialog, Warszawa 1997 (6 stages); lub B. Scott, *Negocjowanie*, [in:] *Praktyka kierowania*, D.M. Stewart, PWE, Warszawa 1994 (7 stages)]

The next ethically important aspect of negotiations is taking into consideration some of the universal rules of choosing the fair solution:

- input of work – a party that brings greater work input to the same enterprises, receives greater part of the earned profits;
- equality – parties share profits equally, the input is not meaningful, - correspondence to the needs – fair division is the one that takes into account reasonable needs,
- correspondence to the chances – division according to the use that it may be of for the parties; - precedent – the basis of the agreement are solutions from the past (with a given, or different partner) (Rządca- Wujec 1998)

Lewicki and Litterer suggests that a process of ethical negotiations should be encouraged by the following verbal tactics: (Fisher et al. 1990)

**Table 1: The basic tactics supporting process of ethical negotiations**

Phrases	Rules
Please, correct me, if I am wrong.	Verify the facts in a way that both of the parties agree with them.
We appreciate, what you have done for us.	Separate people from the problem. Help the other party, even if you have critical attitude towards his offers.
Honesty is important for us.	Make the negotiations based on the rules.
We would like to resolve this conflict on the basis of the rules, not selfish interests and strength.	Protect your own opinion, going back to the rules, even if the second party tries to bring them to the private ground.
May I ask you some questions in order to check, whether obtained information is true?	Ask questions, do not make reservations.
Which rule is the basis for your action?	Discover the rules being the basis of the activities of the other party.
Let me check if I understand properly what you have told.	<i>Listen actively.</i>
Let me come back to this conversation later.	Make an evaluation of your position over the sphere of negotiations. Verify the facts, present considered opinions, consult your suggestions with the people that you represent.
Let me understand the doubts in perceiving some of your arguments.	Present explanation before you express your suggestions.
One of the fair solutions could be based on...	Present your suggestions in the context of honesty.
If we achieve an agreement... If we do not achieve an agreement...	Present consequences of an agreement, and a lack of agreement.
I would be pleased if we accept the solution the most comfortable for you.	Let the other party feel that he has the possibility to influence the final agreement.
It would be nice to cooperate with you.	Finish the negotiations with a friendly tone.

Source: R.J. Lewicki i J.A. Litterer, *Negotiation*, IRWIN, Illinois 1985, p. 126, elaboration on the basis of R. Fisher, W. Ury, B. Patton, *Getting to Yes...*, s. 117-128 (in Polish edition p. 167-178).

Following the above rules allows to stay in control over the flow of negotiations. By leading to the state of lowering the level of emotions and objectivisation of a conflict and transferring the problems to the substantive ground, the negotiators are able to realize activities aiming to the acceptance of a solution that is optimal for both parties.

## Conclusions

In practice, many companies try to resolve a problem of unethical activities, by creating the internal codes of conduct, obligatory and binding for their negotiators. Such code creation is not an easy job, as it requires good knowledge in ethics, as well as specific character of one's entrepreneurial activity and negotiation policy. The essence of ethical codes lies in respectability of their norms, instead of being treated as a collection of necessary limits. The basis for such respectability is responsibility of the parties for the whole negotiation process. The 20<sup>th</sup> century philosopher, Jean Paul Sartre told, that responsibility is „an objective awareness of being a perpetrator of an event or item” (Kořakowski-Pomian, 1965). Sense of responsibility makes us think on consequences of our own behavior and our ways to treat people.<sup>1</sup> We need to remember, that once one uses an unethical technique, an experienced opponent will immediately notice the fact of taking part in a dirty game. That is why manipulation may not lead to the expected results, instead, leading to worsening relationships and making the negotiation harder. (Filek, 2011)

Negotiation is an art of obtaining compromise (otherwise, the notion of dictate would be considered) by means of a conversation leading to mutual concessions, which eventually brings both parties to an agreement. Negotiations may be difficult, long-lasting and arduous, but its effect sometimes may be impossible to be underestimated, e. g. avoiding, or abandonment of war in case of international conflicts. Nevertheless, not everyone is allowed to have the honor to negotiate, there are known some examples of the countries' Policy „zero tolerance for terrorism”, in which any concessions towards members of such groups are not accepted (similar in case of e. g. traitors). Therefore, at the beginning of negotiations some of the potential negotiators are excluded, as considered to be unreliable.

In practice, it would be difficult to find negotiations without manipulations (since ancient times the „ally” of manipulation was the art. of rhetoric), and if we have contact with this phenomenon, negotiations are considered as unprofessional.

How to evaluate moral art of negotiation based on manipulation, various tricks and techniques, if it uses various forms of lies? This question cannot be clearly answered. It would be dependent on the individual, historical and cultural factors. One thing that could be undoubtedly stated is that most of negotiations, regardless the fact whether it is business negotiation, or connected with establishing collective agreement in the times of privatization, or with the trade unions, or national administration, etc. Regardless the fact that the same, sometimes morally ambiguous tactics, it needs to the compromise learning profit for both sides. Arguments, that something is good, because it brings positive effects, undoubtedly caused indignation of many ethics, e. g. giving birth of a healthy baby does not justify rape. According to that, the education in the area of negotiations should be more developed and fight against stereotypes, in order

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<sup>1</sup> This one is particularly significant problem, especially in terms of another Great Migration Wave.

The EU negotiators work under great responsibility for numbers of refugees let in to several countries of European Union.

to have the negotiators to perceive profits and satisfaction from the ethical way of negotiations.

Kamiński in his works on negotiation focuses on efficiency as a criterion, which he understands as one's striving to maximize one's profits, which again, has major influence on the negotiators behaviors. The same profit here is seen as a main reason of unethical solutions in business and negotiation. (Kamiński, 2007) (see also Kamiński, 2003)

Unethical practices, as well as the ones who use them, should be condemned by the general public. Only such collective influence can guarantee that, unethically obtained profits, will generate losses inevitably in longer perspective.

Summarizing:

- question: what is the method of maintaining ethical standards in negotiation?;
- answer: the persons oriented on moral integrity should be kept convincing, that one should be honest in negotiation (like in general life); the profit oriented persons need to be convinced, that ethical activity is more profitable.

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## **2.4. THE IMPACT OF CREATIVITY ELEMENTS ON EDUCATIONAL SERVICE – A CASE STUDY FROM IRAQ**

### **Summary**

This study aims to determine the impact of creativity elements on educational service quality dimensions depending on the hypothetical scheme takes into account the correlation between two variables, and adopted two fundamental hypotheses to determine the impact and correlation between research variables. The theoretical side of the research was written by taking advantage of the literature of the relative subject. Duhok Polytechnic University in Iraqi-Kurdistan Region has been chosen to conduct the field part of the study; research sample consist of 70 individuals of academic staff of the chosen university. A questionnaire has been developed to collect data and information on the field side, and through using statistical methods (frequencies, percentages, mean standard deviation, Spearman's rank correlation and regression analysis). The descriptive data have been analyzed and research hypotheses have been tested. The most important findings of the study were: the emergence of attention and concern by the university to the concept of creativity reflected in their answers that creativity elements have a significant positive impact on educational service quality dimensions and a significant positive correlation has been proved between them as well. The study reached a set of proposals the most important is to try to take advantage of the strengths owned by the university regarding the elements of creativity that the results showed a clear impact on the services provided, especially originality and sensitivity to problems variables.

**Keywords:** creativity elements, educational service quality dimensions, higher education

### **Introduction**

In today's competitive academic environment, higher education institutions all over the world face massive challenges. It is not a secret that higher education is more competitive than ever, because of the globalization and the new technology which affects all aspects of today's business environment especially in higher education sector. Quality of services which universities offer at present, become the matter which cannot be avoided. Service quality has been extended from business to education. Many universities have been affected by service quality both for teaching and administrative support functions. Universities struggling to get competitive advantage and this goal can be achieved through discovering new and creative methods in

teaching and learning, and providing appropriate means and materials in order to offer the best services which characterized by flexibility and adaptability. The idea of this study comes from here. Therefore, the study tries to investigate the impact of creativity elements on educational service quality dimensions in Duhok Polytechnic University.

### **Research problem**

The creativity dimensions are not the matter of consideration by academic staff in Duhok Polytechnic University which will affect the quality of services that university offer to their customers. And the result will be the failure of the university to compete in education business especially after the reforms in education system started by the ministry of higher education and scientific research in Kurdistan Regional Government.

The main question of this study was the following: Is there an impact of the creativity elements on educational service quality?

Two additional questions were formed based on the main question:

First question: To what extent the academic staff in Duhok Polytechnic University is aware about the creativity elements in teaching process?

Second question: Is there an impact of the creativity elements on educational service quality?

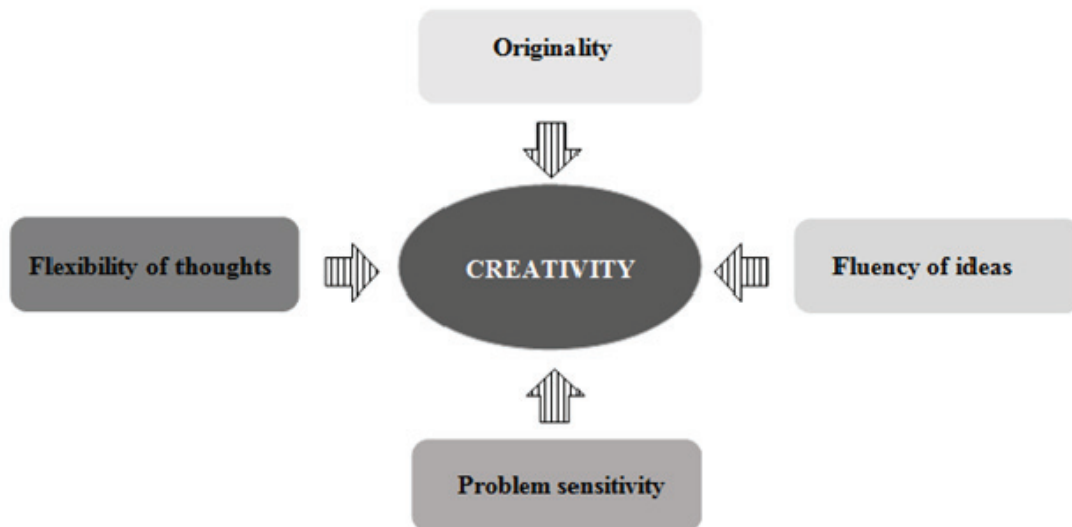
### **Literature review**

#### ***Elements of creativity***

The role of creativity and creative employees for organizations' performance growth cannot be overlooked in today's competitive dynamic world (Ul Hassan et al. 2013). Amabile (2012) defined creativity as the production of a novel and appropriate response, product, or solution to an open-ended task. John (2004) proposed creativity as the ability of people, and then the ability of employees, to combine ideas in a unique way or to make unusual associations between ideas. Creativity is the ability to think in ways and forms that are new, different and not seen in other individuals (Bosiok et al. 2013). By summarizing the above definitions and explanations, we can say that creativity is the ability of a person or employee to produce and generate useful and novel ideas concerning products, services, and processes or solving problems.

By reviewing previous studies and literature related to the topic of creativity, we could find that most of the researchers and authors are agree about these four main elements of creativity (Figure 1.)

**Figure 1: Four elements of creativity**



Source: own composition

Originality is the quality that creates unique or extraordinary thoughts, unusual ideas, or the first of a kind Shively (2011). Flexibility of thoughts is the individual's ability to change the method or suggest a variety of different approaches toward a problem or situation. Fluency of ideas is the first step of creative endeavour or problem solving. If ideas may be generated by different tools and methods, and they shall be examined or evaluated, are they formulate opportunities, or are they feasible or not (Shively, 2011). Finally, problem sensitivity is an ability to determine problems and being aware about the needs for change or for new approaches or methods (Se Kim et al., 2008).

### ***Service Quality***

The higher education industry all over the world has undergone massive growth in recent years, mainly to keep the moderate level of the proposed educational services. Service quality defined by Gržinić (2007) as the way to manage business processes in order to ensure customer satisfaction. The improvement of service quality in higher education institutions lies in the institution's ability to provide an overall climate and culture for change through its different operating systems, decision-making systems, and human resource practices Mosadeghard (2006).

Based on the deeply review, many dimensions of service quality have been founded by authors in different sectors, while the most widely accepted model by researchers is the five dimensions of service quality (SERVQUAL) which has been developed by Parasuraman et al. (1985). Firstly they determined ten dimensions of service quality. In a refined study in 1988, Parasuraman et al. reduced the number of service quality dimensions from ten to five, contending that these five components completely capture

the service quality field. According to them, the five final service quality dimensions are Çerri (2012):

1. Reliability: ability to achieve the promised service accurately and dependability;
2. Responsiveness: readiness provide on time service;
3. Assurance: ability of a service firm to encourage trust and confidence through knowledge and courtesy of employees;
4. Tangibles: appearance of a service firm's physical facilities, equipment and appearance of employees;
5. Empathy: willingness and capability to give individualized attention to customers.

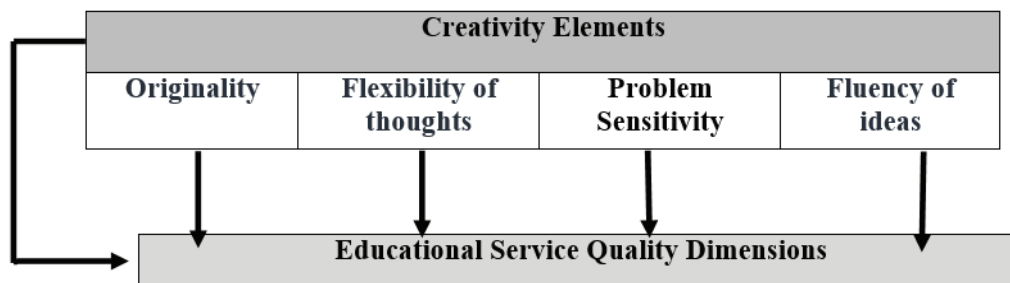
## Methodology

The methodology of this study depends on the resources and previous studies to cover the theoretical part, while the practical part will be covered through statistical methods to analyze the collected data through Statistical Packages of the Social Science (SPSS).

## Research framework and hypotheses

Stages and scope of the research is detailed in Figure 1.

**Figure 1: Research framework**



Source: own

Two main hypotheses were set, with four sub-hypotheses in each:

H1: there is a significant correlation between the elements of creativity variables and educational service quality dimensions.

- H1a: There is a significant correlation between fluency of ideas and educational service quality dimension.
- H1b: There is a significant correlation between flexibility of thoughts and quality and educational service quality dimension
- H1c: There is a significant correlation between sensitivity to problems and educational service quality dimensions.
- H1d: There is a significant correlation between originality element and educational service quality dimensions.

H2: Creativity elements have a significant impact on educational service quality dimensions. And it is differ from one element to another.

- H2a: Fluency of ideas has a significant positive impact on educational service quality dimensions
- H2b: Flexibility of thoughts has a significant positive impact on educational service quality dimensions.
- H2c: Problem sensitivity has a significant positive impact on educational service quality dimensions.
- H2d: originality has a significant positive impact on educational service quality dimensions

### *Population and sampling*

Universities are the most crucial sources to enhance societies from successful and creative people, and the educated and developed societies are tied to the outputs of universities.

This study chooses Duhok Polytechnic University as a population of the study, because it is one of the newest universities in Kurdistan Region, and tries to improve its staffs and it pays a significant attention to the issue of service quality. The sample of the study is the academic staff of the university.

Eighty questionnaires were distributed to the academic staff of the university and seventy completed and usable questionnaires were collected representing a response rate of 87%. Table 1 shows the analysis of demographic details of the survey respondents.

*Table 1: Demographic features of the sample*

<b>Gender</b>	<b>Male</b>		<b>Female</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
	<b>52</b>	<b>74.2</b>	<b>18</b>	<b>25.8</b>

<b>Age</b>	<b>26-30</b>		<b>31-35</b>		<b>36 and more</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
	<b>6</b>	<b>16</b>	<b>20</b>	<b>9</b>	<b>16</b>	<b>35</b>

<b>Educational level</b>	<b>PhD</b>		<b>Master</b>		<b>Other diploma</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
	<b>4</b>	<b>6</b>	<b>62</b>	<b>88</b>	<b>4</b>	<b>6</b>

<b>Position</b>	<b>Associate professor</b>		<b>Assistant professor</b>		<b>Assistant lecturer</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
	<b>2</b>	<b>3</b>	<b>10</b>	<b>14</b>	<b>58</b>	<b>83</b>

<b>Years of working experience</b>	<b>16 and more</b>		<b>11-15</b>		<b>6-10</b>		<b>1-5</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
	<b>8</b>	<b>11</b>	<b>13</b>	<b>19</b>	<b>23</b>	<b>33</b>	<b>26</b>	<b>37</b>

Source: own data

### **Data collection and data analysis**

We used both primary and secondary data for this study. Primary data was collected through structured questionnaire. This method is good as it gives the researchers the opportunity to clarify any ambiguities in the instrument. The questionnaire was developed by the research team based on the literature review on the related topics.

The questionnaire consists of three parts; the first part contains information related to the demographic of the targeted survey participants.

The second section of the questionnaire looks for the measurement of independent variables (components of creativity). It contains (20) questions, for each component (5) questions.

The third part of the questionnaire holds the measurement of dependent variable (educational service quality dimensions). It includes (25) questions for each dimension (5) questions.

Two survey instruments used in this study to investigate the correlation between dependent and independent variables. Respondents of this questionnaire will rank questions based on a five-point Likert scale (5: Strongly agree, 4: Agree, 3: Sometimes agree, 2: Disagree, 1: Strongly disagree).

### **Data Analysis**

This part includes testing both correlation hypothesis and impact hypothesis of the study.

#### *First: Testing correlation hypothesis*

The content of the first main hypothesis indicates that there is a significant correlation between the elements of creativity variables and educational service quality dimensions.

**Table 2. The values of simple correlation coefficient between the elements of creativity variables and educational service quality dimensions**

I.V. (Creativity elements)	Originality	Problem Sensitivity	Flexibility of thoughts	Fluency of ideas	Total index
D.V. (educational service quality)	**0.427	**0.409	**0.147	**0.281	**0.429

N= 70    0.01 ≤ \*\* P

Source: own data

The results from Table 2 show that there is a significant positive correlation between the elements of creativity as independent variables and educational service quality dimensions as dependent variable, the strength of the correlation coefficient (total index) for them reached (0.429) at the significant level (0.01). As the table indicates that the strength of the correlation coefficient varies from one variable to another.

Originality variable received the highest value among the independent variables and the value of the correlation coefficient (0.427) at the significant level (0.01), followed by the sensitivity to the problems variable, which the value of the correlation coefficient reached (0.409) at the significant level (0.01). Fluency variable comes thirdly reaching the value of the correlation coefficient (0.281) at the significant level (0.01).

The correlation between flexibility of thoughts variable and service quality dimensions also positive but it is less correlated than the other three variables, the value of the correlation coefficient of the flexibility variable (0.147) at the significant level (0.01). Thus the first main hypothesis is accepted which states (there is a significant correlation between the elements of creativity combined and educational service quality dimensions). Similarly, the first group of sub-hypothesis are accepted based on the finding in Table 2.

#### *Second: Testing impact hypothesis*

The content of the second main hypothesis indicates that elements of creativity variables have a significant impact on educational service quality dimensions.

**Table 3: analysis of correlation impact of combined creativity elements on educational service quality dimensions**

Creativity elements	Beta	B	R <sup>2</sup>	T	F	Significance level
Educational service quality	0.472	0.585	0.18	3.919	15.360	0.000

P ≤ 0.01      N= 70

Source: own data

The results from the above table which is concerning to the results of regression analysis which shows that there is a significant positive impact of independent variables (combined elements of creativity) as explanatory variables on educational service quality dimensions as responsive variables. Which indicates by results of analysis of regression coefficient (B) and the value of (F-test) that is (15.360) and the significance level of (P-value) is (0.000) which is less than the statistical significance level of this study which is (0.01).

Through noticing the value of (B) which is (0.585) with support of (T) show that the value of (T-test) is (3.919) and the significance level is (0.000), it is a positive significant level at significant level (0.01).

Thus the second main hypothesis is accepted which states (the elements of creativity variables have a significant impact on educational service quality dimensions)

While the impact correlation of each element of creativity separately on educational service quality dimensions illustrated in Table 3.

**Table 4: Analysis of impact correlation of the elements of creativity on educational service quality dimensions**

Creativity elements	Educational service quality dimensions					
	F	T	R <sup>2</sup>	B	Beta	Sig.
<b>Fluency of ideas</b>	5.821	2.413	0.079	0.462	0.281	0.009
<b>Flexibility of thoughts</b>	1.500	3.783	0.022	0.236	0.146	0.000
<b>Problem Sensitivity</b>	13.662	3.696	0.167	0.565	0.409	0.003
<b>Originality</b>	19.446	4.410	0.222	0.587	0.472	0.000

P ≤ 0.01    N= 70

Source: own data

The findings in Table 4 show that there is significant positive impact of the first variable of the elements of creativity (fluency of ideas) on the educational service quality dimensions which indicates by results of analysis of regression coefficient (B). The value of (F-test) that is (5.821) and the significance level is (0.009) which is less than the statistical significance level of this study which is (0.01).

Supported by the value of the coefficient of determination R<sup>2</sup> which is (0.079) this means that the fluency variable contribute and interpret (7.9%) of the variation founded in educational service quality variable. Through observing the value of (B) which is (0.585) with support of (T) show that the value of (T-test) is (3.919) and the significance level is (0.000), it is a positive significant level at significant level (0.01). Thus the second sub-hypothesis is accepted, which states (there is a significant positive impact of the first variable of the elements of creativity (fluency of ideas) on the educational service quality dimensions. Likewise, the second group of sub-hypotheses are accepted depending on the results of Table 4.

## Conclusions

Because of the complexities of this era and high competitiveness in business environment, this affected heavily the organizations in general and service organizations in particular, organizations who are working in service sector especially universities are looking for the necessary and modern mechanisms in order to achieve the quality of their services. Organizations that have encouraged and stimulated their individuals to adopt creative ways and methods are able to provide the educational services that characterized by appropriate quality and distinguish their services from their competitors, and through the four elements of creativity (fluency, flexibility, problem sensitivity and originality), organizations can improve the quality of service provided. These four elements considered as a roadmap for organizations that interested in the concept of creativity and tend to provide a service with adequate quality.



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*Rafał PRUSAK*

## **2.5. ANALYSIS OF SELECTED ASPECTS OF THE IMPACT OF INTELLECTUAL CAPITAL ON INNOVATION MANAGEMENT**

### **Summary**

Intellectual capital is one of the most important contemporary elements allowing companies to search and build a market advantage. Its range covers almost all tangible and intangible resources of the company. Analysis of the structure allows for a more complete understanding of the relations between the various resources of the company. This makes it possible intensification of the processes leading to the occurrence of synergic effect. An important area which activities in the management of intellectual capital may affect are innovative processes. This requires proper approach to all components of intellectual capital: the relational capital, structural capital, and - above all - human capital. The aim of the research undertaken by the author was trying to analyze some elements related to intellectual capital, which may affect the process of innovation. The study presented in this article was conducted on a sample of 100 companies, of which 50 have implemented some aspects of the intellectual capital management system.

**Keywords:** intellectual capital, innovations, human resource management

### **Introduction and literature review**

The introduction of the concept of intellectual capital allowed – both theorists and practitioners – a fuller focus of their work, research and analysis related to effectiveness of enterprise operation. Projects related with different threads, seemingly unconnected, could be logically integrate. Information incoming from the projects could be aggregated and allow identification – previously undiscovered or not analyzed, in this context dependencies and relationships. At the same time the concept of intellectual capital has led to a reorientation of methods and techniques of business management as a result of the full emphasize the role of intangibles and pointing them as key factors of success. Concepts related with intellectual capital are undergoing a fairly intensive development and there are fundamental factors stimulating this development, namely: the wider acceptance of the human capital concept (which contributed to the growth of investments in this area), the violent and turbulent market changes (pushing to look for ways to increase the flexibility of the structures and methods of operation relying on intangible resources not subject to rapid devaluation) and the increase in the intensity of the competitive contest (which forces the use of unique knowledge-based methods of building market advantages).

Intellectual capital – despite intensive research – still remains largely unrecognized. The reasons for this should be sought in its construction: multi-layered, complex and

filled with a number of unclear connections and relationships. This is well illustrated by J. Fitz-Enz (2001), who interpret intellectual capital as a complex combination of processes and culture connected with a network of various relationships and human capital. Such an approach to the problem implies taking into account another important problem hindering the analysis and understanding of intellectual capital, namely the human factor. People are – from the point of view of the development of intellectual capital – the most important resource for organizations: seeking, processing, creating and using knowledge to achieve the strategic objectives and building a market advantage. At the same time, however, as a result of their diversity and unpredictability (positively and negatively) people are very difficult resource to manage. The effective development of intellectual capital requires consideration of such factors as: intuition, interpersonal communication, feelings or desires of the people (Skrzypek, 1999). Extensive analysis of the individual elements of the personnel function in the context of their correlations and relationships with the intellectual capital of an enterprise brings the list of the most important activities, whose results contribute to the development of intellectual capital. Personnel policy and strategy need to be based on the priority of developing valuable human capital and the importance of continuous monitoring of existing solutions to ensure their continuous improvement and optimization. Employment planning should use development path taking into account the needs of both the enterprise and its employees. Preparation of the employment plan should be conducted simultaneously with the determination of the enterprise's demands for knowledge and competence. In area of employee selection it is important not only to attract individuals characterized by the right competence profile, but also to ensure their quick adaptation in the work environment. Proper development of intellectual capital requires the use of appropriate employee assessment procedures enabling the testing of the employees' knowledge, skills, attitudes or degree of adaptation to the applicable rules and norms of organizational culture.

The thorough analysis of the views presented in the literature providing the grounds for the examining the structure of intellectual capital. Commonly accepted theory in the literature, distinguishes three basic components: human capital, structural capital and relational capital.

Interpretation of human capital its difficult due to its both individual and collective character, which might be considered separately. In individual terms, human capital can be defined as an employee's professional potential, whose extent of utilization is dependent on the individual's integration with the enterprise and involvement. It is dependent on the effective connection of the incentive system with the personality traits of an employee, his commitment and professional potential. In context of collective human capital synergic interactions among the potentials of individual workers may lead to achieving extraordinary and unexpected results and performance. Structural capital and its relationship with human capital should be considered in dynamic terms, especially in the context of their interaction. Structural capital of an enterprise is an important factor determining the range and possibilities of actions that can be taken by employees. In area of relational capital particular attention should be

draw to the elements that make it possible to increase the number of relationships and the strength of ties between the enterprise and entities located in its vicinity.

One of the most important reasons for interest in intellectual capital is building a permanent market advantage. In this context, the intellectual capital can lead to: development of new products, building image of the company, more efficient use of resources, development of plans and strategies which are based on the strengths of the company and market opportunities, strengthening internal and external relations, intensive research and development, etc. (Szara - Pierścieniak, 2007). Managing intellectual capital forces intelligent actions in the enterprise through: implementation of innovations, making creative decisions, conjugated utilization of high-quality knowledge at all levels the organization (Pobrotyn, 2012).

Innovations are one of the most important elements affecting the size and durability of the enterprise market advantage. It should be noted that market advantage can be interpreted and understood in many ways. In simple terms, innovation is everything that is in the minds of customers creates an image of the company or its products and helps differentiate the company from competitors. By using different perspective market advantage is the ability to generate unique competencies and using them to accomplish tasks and processes that are beyond the reach of competitors. Six key processes creating market advantages exists in this broader perspective: strategic investments, building the social image of organization, creating vision of organization, deployment of resources by the actors on the market, defining the success of the organization, shaping the theory of action (Rindova - Fomburn, 1999). It should be noted at this point that none of the market advantages is permanent – competitors' activities, market trends, technological developments and the selling methods contribute to the devaluation of the advantages.

Innovation can be seen as a process of transforming the existing possibilities in the new ideas and putting them into practical use. Begg (1997) describes it as the application of new knowledge in the production process. Schumpeter (1960) It identifies the areas of innovation articulation: the implementation of innovative products, preparation of original production methods, creating of new market, the acquisition of innovative resources or expand existing ones, implementation of new methods of organizing the industry. It is important to emphasize that innovation is a process that occurs in most spheres of human activity. As stated by Drucker (1992) innovation is not an action relating exclusively to the area of science or technology, but also to the evolution of economic and social relationships relates to behaviour of humans occurring in various roles, namely producers, consumers, scientists, ordinary citizens, etc.

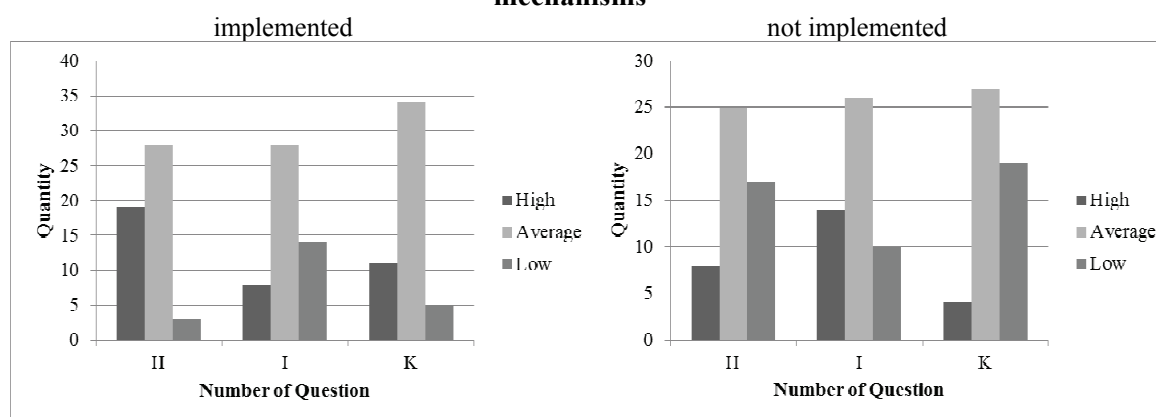
### **Analysis of the results**

The primary objective of the study was an attempt to analyze the basic relationships between the implementation of the company's intellectual capital management mechanisms and innovative processes. The study was conducted using a survey based on a questionnaire with ten questions. Questions covered the following issues: (A)

activities in conducted works, (B) the sources of knowledge, (C) the key factors of success (D) reasons for innovative ideas, (E) impulses to start the innovation process (F) economic effects, (G) the time of implementation, (H) the involvement of employees, (I) the number of problems encountered (J) time spent on solving problems, (K) the amount of grass-roots initiatives. Moreover, additional analyzes were performed to determine the level of correlation between the analyzed aspects and selected strategic factors. These criteria were: company size (small - less than 50 people, average - from 50 people to 250 people, large - more than 250 people), - the type of business (manufacturing companies or service), the attractiveness of the sector (defined for each sector using universal criteria). The research sample was 100 companies of which 50 had implemented mechanisms of intellectual capital management.

The study allowed the identification of several important trends and phenomena. Above all, it revealed a relationship between the fact of implementation of intellectual capital management mechanisms and: the level of employee involvement in innovation processes, the number of problems encountered during the development and implementation of innovation, number of grassroots initiatives resulting in new solutions (distribution of answers is presented in Figure 1). In each of these cases, the correlation was average (respectively 0.36, 0.36, 0.33). In this paper to determine the degree of correlation between the variables the scheme proposed by M. Sobczyk (1998) was used. According to this scheme a correlation between the two characteristics is undetermined if  $r_{xy} \leq 0,3$ , average if  $0,3 \leq r_{xy} \leq 0,5$  and strong if  $r_{xy} > 0,5$ .

**Figure 1: The distribution of answers to questions about (H) involvement of employees, (I) the number of problems encountered and (K) the amount of grassroots initiatives in the context of the implementation of the company's intellectual capital management mechanisms**



Source: own studies

Analysis of relationships between the analyzed aspects and selected strategic factors allowed to identify additional dependencies (Table 1). Most of the observed relationships was related to the size of the company and its development stage (age). The type of business, as well as the attractiveness of the sector does not lead to clear results.

**Table 1: Most important relationship identified in the research**

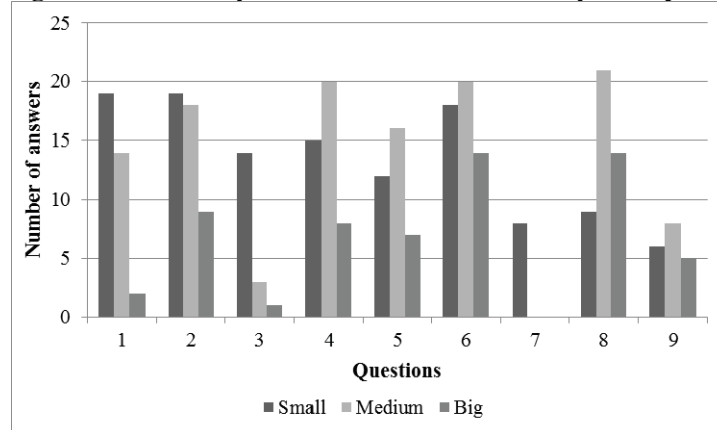
<b>No.*</b>	<b>Company size</b>	<b>Age of the company</b>	<b>Business type</b>	<b>The attractiveness of the market</b>
A	pronounced(0.53)	undetermined	undetermined	undetermined
B	pronounced (0.54)	undetermined	average (0.49)	average (0.48)
C	undetermined	undetermined	undetermined	undetermined
D	undetermined	undetermined	undetermined	undetermined
E	undetermined	undetermined	undetermined	undetermined
F	average (0.48)	average (0.37)	undetermined	undetermined
G	undetermined	undetermined	undetermined	undetermined
H	average (0.36)	undetermined	undetermined	undetermined
I	average (0.44)	average (0.36)	undetermined	undetermined
J	average (0.40)	average (0.36)	undetermined	undetermined
K	undetermined	average (0.34)	undetermined	undetermined

\* Question numbers in accordance with previously described questionnaire

Source: own research

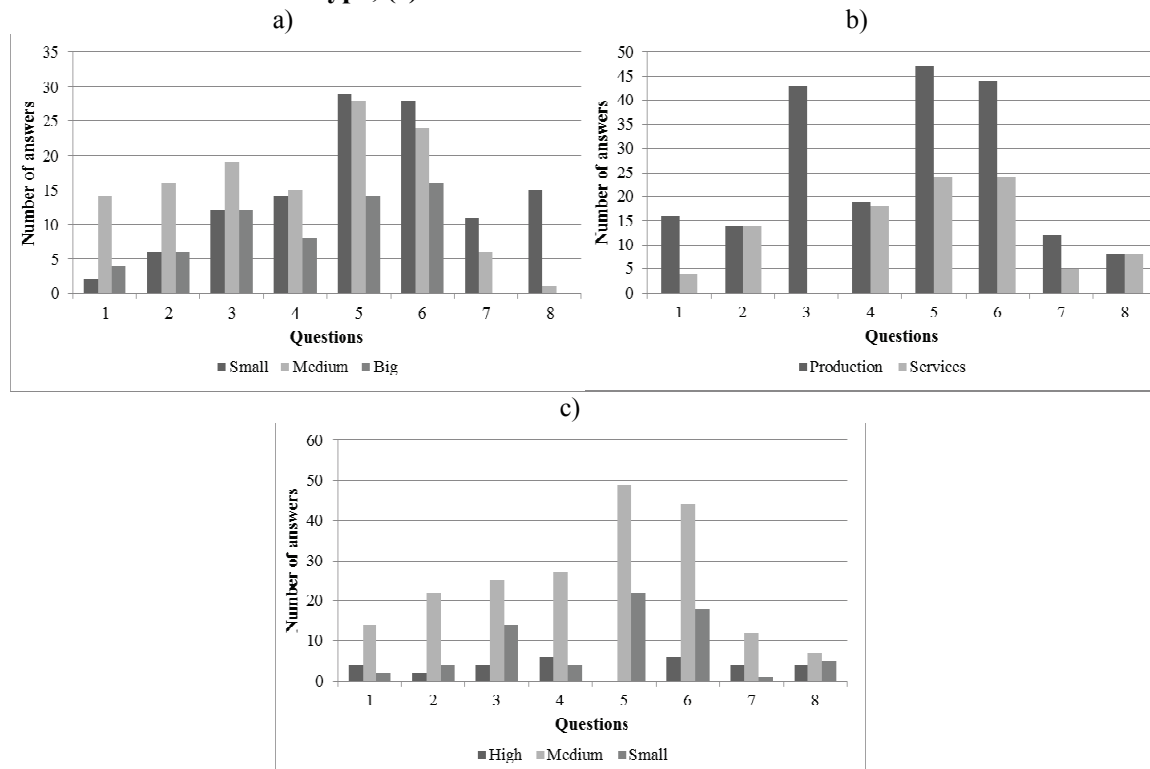
Figure 2 shows the distribution of answers to questions concerning the type of activities undertaken by the company. Small companies in particular focus on organization of research programs and determining of their own human capital capabilities. For large enterprises the most important activities were: the development of research programs, analysis of the impact of innovation on the employment structure, defining enterprise's opportunities related to human capital. Companies in this group least often pointed: analysis of market trends and solutions used by competitors.

Many relationships have been identified in the context of the sources of knowledge (Figure 3). From the point of view of company size only customers and competitors were indicated as the most important source in all groups of enterprises. In the context of other responses (universities, research institutions, research – development units, suppliers) significant divergence in distribution of results was observed. Among production companies research - development units were indicated more frequently.

**Figure 2: Summary of activities undertaken by enterprises**

Questions: 1. Organization of research programs, 2. Determination of their own human capital capabilities, 3. Examination of the impact of innovations on the employment structure, 4. undertaking initiatives expected to shorten the innovation cycle, 5. Analysis of the technological base in the context of the planned changes, 6. Analysis of the incurred financial outlays, 7. Determination of possibilities for strategic alliances, 8. analyses of market trends and solutions used by the competitors, 9. Others.

Source: own research

**Figure 3: Summary of sources of knowledge according to (a) company size, (b) business type, (c) the attractiveness of the market**

Questions: 1. Universities, 2. Research institutions, 3. Research units, 4. Suppliers, 5. Customers, 6. Competitors, 7. Seminars, conferences, 8. Other.

Source: own research

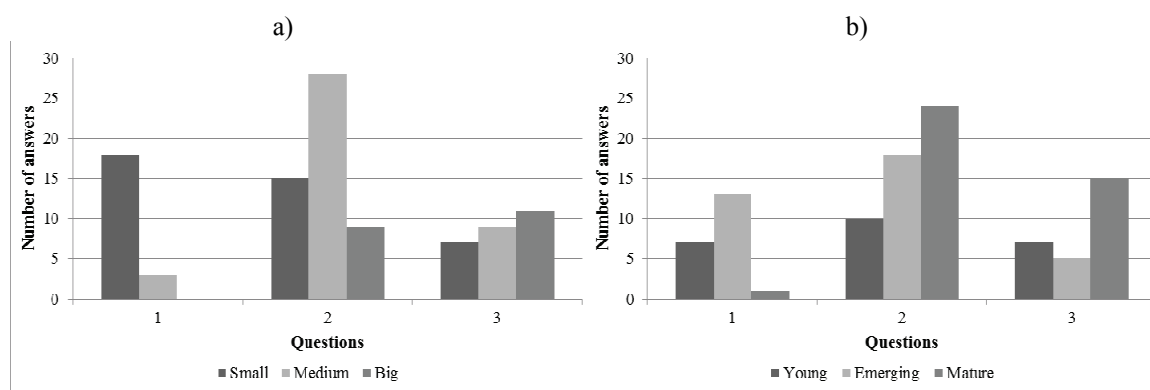


Interesting data distribution was observed in the analysis of the economic effects of implemented innovation (Figure 4). The effects in small and medium-sized enterprises often were consistent with the plan or exceed the earlier assumptions. In large enterprises declared the results were often lower than planned. Analysis of the results in the context of the stage of development of the company (its age) showed that young companies have more problems to get planned economic effects. This may indicate that the proper development and implementation of innovations require prior experience in the implementation of these - or similar - processes.

The size of the company also had an impact on such factors as: involvement of employees, the number of encountered problems, and the time spent to solve problems. In all these aspects of higher results were declared by small and medium-sized enterprises.

Also interesting was the distribution of responses related to number of grassroots initiatives in the context of the development stage of enterprises. Developing companies declared a larger number of these types of elements. In the group of mature companies - those figures were significantly lower.

**Figure 4: Summary of economic effects according to (a) company size, (b) age of company**



Questions: 1. Above plans, 2. As planned, 3. Below plans.

Source: own studies

## Conclusions

Identified relationships allow for conclusions about the basic relationships between intellectual capital management and intensity and efficiency of innovation processes. The introduction of mechanisms of intellectual capital management directs the company to take better advantage of intangible which are an important element of building a competitive advantage in today's market. By placing greater emphasis on knowledge, its acquisition, development and distribution it is possible to make better use of the potential accumulated in the human resources. People with their professional and personal experience are the only internal source of innovation.

Analysis revealed the existence of certain relations in the examined areas. Certainly, they require confirmation in a larger research sample. Very interesting are relationships between the fact of implementing intellectual capital management mechanisms and important aspects of the innovation process, such as: level of employee involvement in the undertaken initiatives, number of grassroots ideas and concepts that may become the seeds of new solutions, number of problems encountered in process of development and implementation of innovations.

Additional strategic criteria used in the research also allow identifying interesting phenomena and trends. Above all, the relatively small impact of the business type and the level of market attractiveness. It would seem that – especially – the first factor should have bigger impact on the diversity of the results. Undeniably the greatest impact on the distribution of data has a size of enterprise and stage of development of enterprises.

Intellectual capital management is a process that requires a broad, interdisciplinary approach. The possibilities for its development lie virtually in all areas of the enterprise's operation and all resources possessed by it. The issues related to intellectual capital require therefore a comprehensive approach to be taken, which will significantly increase the level of complexity of the problem, but will also enable the enterprise to attain a greater likelihood of utilizing the potential that it has.

Intellectual capital – and its relationship with the different areas of business management – still requires intensive research. The potential in this area is very large and can lead to getting the distinct strategic advantages. Managerial staff often does not try to collect all the resources required to conduct the business activity within the organization, focusing rather on maintaining control only on the strategic resources. Material resources more easily lend themselves to observation, measurement and analysis. An enterprise has also much greater possibilities of acquiring or selling them. Immaterial assets, related primarily with people, have no physical or financial form; nevertheless, they are an important element of the enterprise's functioning and building competitive advantage. In addition, most of these resources cannot be purchased, but must be created and developed.

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## 2.6. THE INTUITION IN MANAGEMENT – ESTABLISHED KNOWLEDGE AND PERSPECTIVE OF EVOLUTION

### Summary

This work presents the issue of intuition as a mental ability and its usefulness in management. The presented contents were divided into two informal parts. The first part shows the theories which are commonly accepted in management sciences. It consists of those views which everyone agrees with, for example, that intuition actually exists; and the views which are not shared by everyone, for example, the question of usefulness of intuition in practice. This part also presents how intuition is understood by management of different enterprises. Some aspects were shown which should be taken into consideration in order to understand the issue of intuition in management completely. Typical behaviour of the managers who justify the necessity to appeal to intuition in their managerial practice and conditions of management was considered to be the most important. The stereotypes in approaches to intuition were also determined. The most important conclusions of in-house research were presented. It follows from them that enterprises do not carry out systematic analyses directly connected with intuition. More than that, the problems were presented which make the use of intuition in the process of management difficult. Some important approaches which help increase the effectiveness of the use of intuition in organizational practice were mentioned. The key research questions, which have not been answered yet, were formulated.

**Keywords:** intuition, intuitive abilities, managerial competences, management

### Introduction

Human resources are considered to be the main determinant of a market success of an enterprise. Irrespective of a model of organization, it can be assumed that the most important element of human resources / human capital are managers. Management personnel generates the greatest value of an organization in the form of intellectual capital. They also determine effectiveness of employees' activities.

An answer to the question about key factors which have an influence on the level of managerial effectiveness has not been found yet. However, in the 20<sup>th</sup> century there have been carried out a lot of experimental research in this direction. Common conclusions have not been reached neither by the suggested theories of managerial characteristics nor by the competence theories. An "exemplary model" of a set of characteristics has not been found, which in a particular case would differentiate efficient managers from inefficient ones. Alike in the case of the theory of attributes, it

has not been possible to point out unambiguous managerial competences which would one hundred per cent determine a manager's efficiency. The following factors which determine the efficiency in a managerial work are considered to be the most important: psychological characteristics, talents, knowledge and skills. Taking into account the fact that contemporary scholars who examine the factors of success at work of managerial personnel do not have a common opinion about which characteristics or competences have the strongest influence on the managerial efficiency; however, they mutually share one opinion that their influence in this respect cannot be neglected.

The most important aim of the present work is to present the issue of intuition as an intellectual competence – in the concept of management based on competences, which is more and more useful in managerial work. The main attention is focused on two basic aspects concerning intuition:

1. Presenting the issues which are commonly acceptable in management sciences – which make the so called normative knowledge, and
2. Presenting the problems which make it difficult to use intuitional skills in managerial practice. These issues still concern some branch researchers and require further investigation.

### **Intuition and management**

Economic sciences, including management sciences, are continuously developing; they are evolving and new streams, conceptions and methods of managing are still appearing. However, since 1956 when Herbert Simon announced his bounded rationality of managerial decisions (1957), nothing has changed. Newly developed concepts did not contribute much to reduce the risk of decision-making processes and later the risk connected with business. People are not able to solve all problems in a rational and objective way; the choices they make are often far from being optimal. They still have to turn to intuition. This correctness also concerns the decisions made by managerial staff in enterprises. The necessity to use intuition in managerial processes takes place because a small number of decisions in contemporary organizations can be made on the basis of complete, precise and updated information. Decision-making processes are usually of intuition-analytical character.

Behavioural streams are strongly developing in economic sciences. They pay more attention to non-economic factors of development of an organization. Global crisis, which started in 2007-2008 in the United States and evolved from a financial crisis, via economic crisis to a current debt crisis in many countries, contributed a lot to their development (ed. Mączyńska, 2014). Both in economic theories and management sciences it has been pointed out that intuition in decision-making processes has an important influence (e.g. in all the theories of decision-making, together with other notions, the intuitive approach is also taken into consideration). However, in business practice the issue of intuition is not much underlined. Usually, in organizations nobody makes analyses connected with intuition directly. Thus, it is crucial to take any activities which would introduce the issue of intuition to the managerial practice.

### Understanding of intuition – established theory

Intuition is still considered to be one of those properties of the human brain which has not been completely understood. It is one of the most secret notions connected with human capital analysis. Scientists mutually share the idea that intuition really exists. However, they do not agree in the question of its nature which explains what this ability is. There is no unanimity in the question of usefulness of intuition in practical activities. For this reason, scientific literature of the subject presents many definitions of intuition; there are differences in its understanding and estimation of its usefulness. In the views presented by different authors it is possible to distinguish three basic approaches:

1. Viewing intuition in the categories of a process (among others: Jung 1933, Westcott - Ranzoni, 1963, Raidl – Lubart, 2001);
2. Viewing intuition in the categories of a result (among others Kahneman, 2003);
3. Accepting the attributive characteristic of intuition (among others: Myers, 2002, PolICASTRO, 1999).

Colloquially intuition is understood as a certain kind of brainwave, foreboding, sense, the process of indirect obtainment of knowledge, confidence in a certain case without a conscious understanding. Understanding of intuition in such a way is also typical of managerial staff of an enterprise. The respondents, who tried to define this notion, often showed that intuition was: an internal voice, a certain thought, feeling, foreboding helpful in a decision-making process, which can guide when making a decision, which can incline to a certain behaviour. (Methodology of the in-house research concerning the issue of managerial intuition, characteristics of a research population and the research results were fully described in a monograph: Jędrzejczyk W., *Intuition as a managerial competence in theory and practice of management of an enterprise*, “Dom Organizatora” Publishing House, Torun, 2013, pp. 197-239. The research results presented in the current work are the result of implementation of one of the delimited research goals. An attempt was taken to recognize the level of intuitive abilities of management in enterprises and the level of using these abilities in problematic situations. 91% of the managers who took part in the research (87% of women and 93% of men) believe that they understand the issue of intuition – they defined intuition according to their personal knowledge and ideas about the issue)

They also mentioned that it is an internal belief and persuasion about correctness of undertaken actions. The managers who took part in the research identified intuition as an ability to foresee events, to make correct conclusions concerning the future, which are not motivated by any scientific analyses of estimations, a choice without any rational justification. They also mentioned that intuition is a self-preserving mechanism which enables capturing of numerous abnormalities despite the fact that they are not signalled by rational factors. Intuition is a stimulus of an activity which is not always deliberate and efficient. The managers showed that intuition is of a sudden, uncontrolled and subconscious character – it is a sudden thought in which one can see a solution to a problematic situation, which is far from conscious understanding, which often declines rational evidences. The respondents underlined that intuition was not

only an inborn ability, spontaneous and destitute of logical and rational conditions. This is an ability of mind based on both solid knowledge, rich experience and irrational beliefs and emotions. It facilitates making proper decisions in difficult, emergency situations, when there is no complete information concerning an actual situation, sometimes against the logic, analysis or opinions of other participants of a decision-making process. This is an abstract thought process.

The managers who took part in the research pointed out at all important aspects connected with the issue of intuition – its definition, understanding and necessity in decision-making processes which are described in the branch literature. The issues of intuition and of its usefulness in management was discussed by many researchers, among others: W.H. Agor (1998), D. Dean & J. Mihalasky (1974), D.J. Isenberg (1984), N. Khatri & H.N. Alvin (2000), M. Laszczak (2010), H. Leavitt (1975), M.A. Lyles & I.I. Mitroff, (1980), I. Oluwabusuyi (2011), A. Peszko (2013), J.E. Pretz (2008), T.J. Peters, R.H. Waterman (1982), M. Sinclair & N.M. Ashkanasy (2002).

### **Usefulness of intuition in management – established theory**

Similar tendencies as in the case of understanding the notion of “intuition” and its use in decision-making processes concern the issue of its usefulness in management. These tendencies can be described as a management’s point of view.

In order to understand the issue of intuition in management from the holistic point of view, at least two basic aspects should be taken into consideration:

1. Determination of typical behavior of management which states rational justification of the necessity to appeal to intuition, and
2. Determination of conditions of management which also justify the necessity to appeal to intuition in management practice.

Typical behavior of management which states a rational justification of necessity to appeal to intuitions are as follows:

- managers rarely think in a way which can be understood as rational;
- they sometimes formulate aims systematically estimating their value, discussing alternative ways of reaching them and choosing the paths which maximize the expected return on investment;
- usually they avoid rigorous, analytical planning.

Typical conditions of management which justify the necessity to appeal to intuition in management’s practice are as follows:

- more and more complex and dynamic environment in which a lot of problems can be solved only with the help of intuition;
- an appropriate area of impact of management decisions includes reactions to difficult, new, irregularly repeating or unrepeatable situations;
- a lot of factors and criteria which managers should take into consideration when making decisions are of difficult or impossible to measure nature, often qualitative.
- not many decisions of strategic character in enterprises can be made on the basis of complete, precise and updated information.



Intuition by many theorists and practitioners of management is treated as a brain ability which can successfully be used in decision-making processes in the frames of an organization. It is given more and more significance in management and controlling of organizations. Strategic managers should possess this quality. A lot of researchers say that intuition is regularly used in running a business activity. However, it should be remembered that intuitive abilities are only used to complete and eliminate limitations of analytical abilities, but not to substitute them.

### **Usefulness of intuition in management - stereotypes**

Intuition as a cognitive source is understood both colloquially and from a point of view of an organization. It is often seen negatively. It happens so because an intuitive way of making decisions is identified with:

- having incomplete knowledge,
- a lack of system and reliability of thinking,
- a lack of rational evidences concerning the issue.

Managers do not always perceive intuition as an ability (instrument) which can be consciously used in decision-making processes. Often managers do not think that intuition could be the main factor of success in business. They believe that they achieve success due to rational analysis. They often try to prove that the decisions made by them were based on rational evidence. This is supported by natural human inclination to follow the mind. Decision-makers feel the necessity to find arguments and justifications by means of rational thinking. They present their solutions in such a way that they would not raise many concerns. They often hide real reasons – consciously or unconsciously (Barnard, 1997; Dane – Pratt, 2007). This approach is conservative and safe. It happens that intuition contradicts the mind, which makes an additional obstacle to appeal to intuition.

A state of certain chaos and continuous changes, which is to be an important factor of activity, is postulated in management sciences. This postulation is, however, difficult to implement because of natural inclination of a human to stabilization and use of fixed schemes of activity. This regularity also concerns managers. In order to make managers do conscious intuitive activities they should be motivated to them. One of the most important factors, apart from intuitive predispositions, is a certain organizational culture. Organizational culture should be distinguished by a lot of tolerance of intuitive decisions, certain tolerance of chaos and ambiguity, acceptance of uncertainty and risk. It was proved that such an atmosphere at work fosters the increase of the effectiveness of intuitive activities (Hofstede, 2001; by: Malewska 2013). It mainly concerns the activity of low-level managers in large and very large enterprises. Managers in very large companies are usually limited in their freedom of choice. In decision-making processes they have to facilitate by market research and opinions of consulting agencies. As a result, managers rarely base on intuition. Only above average human beings are able to stand up to rational analyses and make decisions intuitively.

### **Intuitive potential of Polish managers in the light of the in-house research results**

The research results presented in the current work are the result of implementation of one of the delimited research goals. An attempt was taken to recognize the level of intuitive abilities of management in enterprises and the level of using these abilities in problematic situations. The presented proposals of own research concern Polish organizational practice. Methodology of the own research concerning the issue of managerial intuition, characteristics of a research population and the research results were fully described in a monograph: Jędrzejczyk (2013).

The obtained results concerning the issue of intuition in management, including intuitive abilities of the managers who took part in the research, are not optimistic. It has been stated that in the companies they do not practice intuitive management in a formalized way. In the enterprises which took part in the research the highly intuitive individuals were not identified, they were not given tasks which required an intuitive approach, they were not supported in their intuitive activities. In recruitment processes to managerial positions intuitive abilities were not taken into consideration. During the trainings conducted for managers their intuitive skills were neither developed nor enhanced. In the implemented competence models intuition was not taken into account. In single cases intuitive potential of managers was used in a conscious way. The level of intuitive abilities of the managers who took part in the research (The analysis of potential intuitive abilities of the respondents was carried out with the help of the AIM questionnaire developed by W.H. Agor (1998)) was 5.52 on the 12 degree W.H. Agor's scale of brain skill, only 1% of the managers had very high intuitive skills. It means that Polish managers in general are characterized by analytical abilities. (To compare – the level of intuitive abilities of American managers in a private sector is 6.15. Very high intuitive abilities have 10% of managers (Agor, 1998))

On this basis one of the most important research conclusions was formulated: In companies systematic analyses connected directly with intuition are not usually carried out. Intuitive abilities and behavior of managers are not analyzed; however, it is understood that these abilities have an influence on the roles and implemented tasks in certain managerial positions.

The obtained results make evidence which empower to make decisions aimed at effective and conscious use of intuition in the management practice.

### **Usefulness of intuition in management – perspectives of evolution**

Activities aimed at a more effective use of intuition in the practice of management are not easy to implement. In scientific literature on management many different approaches can be found which can be helpful in effective use of intuition in practical activities. They are as follows:

- a management approach based on competences (mental competences) (Nosal, 1999),
- an intuitive understanding of strategy (Duggann, 2007),
- a program to manage mind abilities (Agor, 1998),
- a system of managerial intuition management approach (Jędrzejczyk, 2013).

The most advanced approach is a system of managerial intuition management put forward by W. Jędrzejczyk. This system establishes recognition of the level of intuitive abilities of the management, determination of the level of intuitive abilities required at different managerial positions, recruitment of managers with desirable intuitive abilities, development of the mechanisms which would limit the number of biases of intuitive decisions, development of the mechanisms which would increase the efficiency of the intuitive activities, trainings in terms of developing intuitive abilities and trainings in terms of increasing of efficiency of intuitive activities. The suggested approach is systematic and it does not treat intuition selectively.

The highlighted approaches, except the approach of intuitive understanding of strategy, are relatively simple. However, it does not mean that they are easy to use. In order to use them, special knowledge is not required, but you need self-discipline, regularity and persistence in action.

Previous approaches do not solve many problems connected with the issue of intuition in management. Here are the questions which have not been answered by the researchers so far:

1. To what extent do mental abilities influence decision-making?
2. How can a number of wrong intuitive decisions be limited?
3. To what extent does effectiveness of the carried out actions depend on the random factor determined as “luck”?
4. Why are intuitive abilities of top-level managers much higher than intuitive abilities of lower-level managers?
5. How can mental abilities of managers be used optimally?

In order to find out responses to the formulated questions further research and analyses are required.

### **Conclusions**

There is no doubt that intuition is a specific, effective cognitive source and a way to make decisions. However, treating intuition as an instrument to support management is not easy. It happens, first of all, because this brain ability is not fully understood. The results of the in-house research also confirm this argument. It would be better to eliminate intuition from business practice. However, it is not possible.

Theories concerning the issue of intuition in management could be divided into views which everybody agrees with, for example, the fact that intuition exists; and those views which are not shared by everyone, for example, the question of usefulness of intuition in practical activity.

According to the authors the most helpful in effective use of intuition in organizational practice is a system approach to the issue of intuition. This idea is relatively simple. However, it does not translate into easy use.

A lot of questions connected with the issue of intuition in management have not been answered yet. The problem requires further scientific research.

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## **CHAPTER 3**

### **Financial issues and marketing aspects of management**





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### **3.1. LEAN-KAIZEN TOOLS FOR THE ACCOUNTING SYSTEM AND THE DECISION MAKING PROCESS**

#### **Summary**

The accounting is a tool for the registration of the economic events of the company. We can say: “Accounting is the language of the business”. The data from the accounting system can be used in the different field, inside and outside of the company. The data and the information from the accounting – and from the controlling, too - have to be real and trustworthily. The accounting data is the basic of the decision making for the different field of the management and also for the investors, creditors and business partners, too. For the right decision we need real and correct data.

It is a new approach to create real information from the company processes and financial statement by productivity improvement methods. The reality of the information from the accounting system can be increased by 5S, Kaizen, Lean, VSM. The costs of the administrative processes can be decreased and the creation of the information will be more effective. The quality and the speed of the information determine the effectiveness of the all downstream processes. The new way of thinking about the information quality in the accounting is the basic of the Accounting Quality House.

**Keywords:** accounting, management, real accounting data, quality improvement, Accounting Quality House

#### **Introduction**

The accounting data have to be true, fair and real; this is the basic element of the decision making. The accounting uses its own methods and processes for the registration of the economic events. Any process contains losses and the losses decrease the quality of the accounting data. The quality improvement methods can be tools to increase the trustworthiness of the accounting information.

#### **Methodological background**

##### ***The accounting information***

Numerous literature sources and practice regards the accounting as “language of business life”. The accounting’s special feature is the monitoring and numerically recording of the economic processes and based on the records produces information.

Basic features of accounting are that recorded generated data are objective. Of course, the next question is that the understanding of the accounting data and it can be the barriers of the use of accounting information.

There are two fields of the use of the accounting data: inside and outside the company. Both of the users need different data to take decisions of various kinds which are created by specific accounting and controlling systems.

The accounting system has two fields: financial accounting and management accounting.

The essential feature of financial accounting is the regulations for this system are from the outside of the company, mainly are laws or standards. The form of the information is financial reports. The information of financial accounting reports is used by the economical partners, creditors, investors and potential investors, and by the authorities and government. The different companies' data are comparable. Of course, the sector the activity and the size have to be the same of the entities. The information from this system is aggregated and reflects the past.

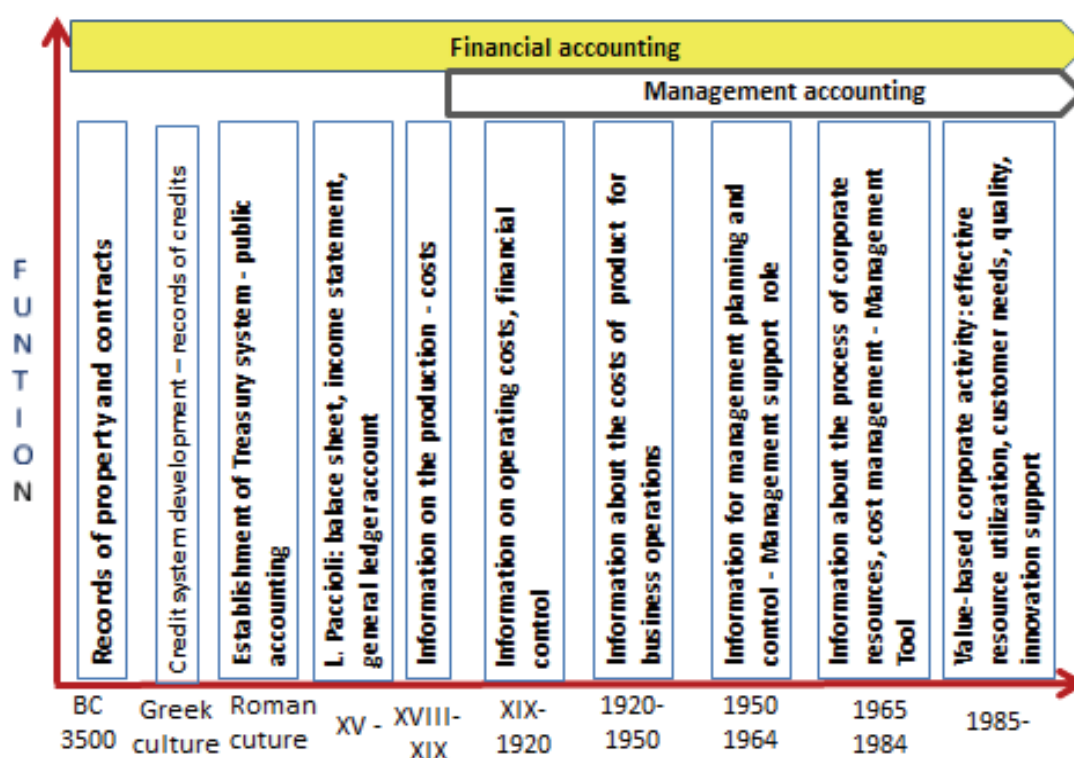
The management accounting system is for the information requirements of the inside the company. The data reflects not only the past, the information have to help the future activity of the entity. The information is about the product and service and the focus of the data recording is mainly the production activity. The recorded fields are decided by itself the company. The main aim is not to fit to the outside regulation. It's essential task to evaluate the company production flow to increase the efficiency and the profit of the entity. The information is not only monetary unit but also in natural units, too.

A further methodological tool of management accounting is the cost accounting from the first-level cost calculation system to the Activity-Based Cost accounting system depending of the company's development level and the information requirements. The form and the content of the information depend on the corporate habits and the other systems in the company.

Basic expectations for the management accounting to be able to adapt quickly the changes of the company's operations and to fit into the company's other integrated systems (human resources, purchasing, sales, production, decision-making levels, etc.). It is essential that the information is timely and often the "reporting period" is different from the usual financial accounting period.

The accounting systems since their formation have significant changes depending on the social, economic and production environment.

Figure 1 shows the stages of the accounting development and their functions. By the appearance of the managerial accounting starts the differentiation between the management and financial accounting. In the figure starting from the appearance of the management accounting we focused on the management accounting functions.

**Figure 1: The accounting development and differentiation of accounting functions**

Source: own design by Abdel-Kader and Luther (2006)

### ***Quality improvement***

Often listened term is the quality and the content of it is not interpreted consistently. Quality is basically the value for which the buyer is willing to pay.

Any activity performed by the entity the customer satisfaction has to be the primary objective because this one can guarantee the company's long-term survival.

The demand for quality and the quality development methodologies (Taylor, 1919) appears at the beginning of the 20<sup>th</sup> century. Quality is a category which can be the key to the development and the reliable operation of a system.

Changes and development of requirements can be detected in the ISO standards, too. In ISO 9001:1994 version, the focus was put on documentation, procedures, inspection and permanent product quality. ISO 9001:2000 and 2008 standards introduced quality objectives, customer satisfaction and process management concept. The new ISO 9001:2015 standards focus on risk management, use of opportunities, skill (or competence) management and customer satisfaction. Due to the fast technological development, technology changed the working methods, geographical boundaries. Production and supply chain became more complex and the information available has multiplied exponentially. These changes significantly affected quality standards and quality systems (Illés and Szuda, 2015).

There are of various methodologies for quality development and the basis of it is the Japan Total Quality Control (TQC). Commitment to quality and development perhaps the greatest example is the Toyota Production System (TPS). The Toyota Production System methodology includes all activities are related to the company and to increase the quality and efficiency. Table 1 shows the Total Management System- TMS of Toyota and we highlighted only the activities related to accounting.

**Table 1: The Toyota's Total Management System- TMS**

The elements of Total Management System- TMS	The content of Total Management System- TMS	Activity
TMS- Toyota Management System	1. Corporate management	
	2. Finance Financial accounting	2.1. Financial income
		2.2. Financial stability
		2.3. Financial growth
		2.4. Short-term profit control
		2.5. Short and medium-term profit plan
		2.6. Management structure
	3. Cost planning Management accounting	3.1. Current cost definition
		3.2. Cost planning
		3.3. Capital investment
		3.4. Budget control
		3.5. Acquisition
		3.6. Cost competitive
	4. Globalization	
TDS - Toyota Development System	5. Drawing plan 6. design review 7. <b>Design to cost</b> 8. Feedback system 9. Technical procedures	
TTPS - Toyota Total Production System	10. Production plan 11. Quality management 12. Process and production planning 13. Production and TPS	
TMSS - Toyota Marketing and Sales System	14. Product and brand 15. Product Design 16. Sales planning 17. Internal organization 18. External organization	

Source: own based on TMS Certification, (2012)

The key of Toyota's success and growth is not only in high-quality vehicles but also in the administrative processes that support their development and production. The

Toyota Management Accounting System (called: cost planning) plays a prominent role in corporate success. The Controlling System is also part of the Managerial Accounting.

Table 1 gives an overview of systems required to run a company. The different systems do not carry out their activities in isolation. There is a continuous feedback between the systems.

For each system the fundamental requirement is the continuous improvement activity and the high level practice. The company's continuous development work started in the 50's and it is still going.

The essential expectation of the company's accounting and controlling systems that it operates effectively reflects real economic processes. One of the possible tools of these expectations can be the application of quality improvement methods.

There are various quality improvement methods and the usage of this methods depends the goal and they can use separately or together.

The methods can be used not only for the production companies but also for the service companies can provide a solution. By the quality improvement methods the administrative processes can be optimized and the reliability (authenticity) of the information can be increased by them.

The most fundamental aim of the quality improvement methods is to eliminate the losses and to increase the "good" process stability. By these methods, the cost will decrease and the profit will increase.

For the development of the accounting system there are four methods to use:

- Lean,
- Kaizen,
- 5S, and
- VSM.

By Lean production or Lean activities, the focus is on the value elements of the processes. This is the basic idea. The main aim is the elimination of the waste.

To achieve the goals it has to be considering the Lean principles (Womack-Jones, 2009):

1. Identify the value - understand how feel your customers the product value
2. Understand flow of value - analyze the flow of goods in the supply chain and identify where value is created and how it could be eliminated the loss
3. Ensure the flow - renew the processes and practices and the organization itself, that insure the value to flow freely through the whole supply chain
4. Introduce the pull - eliminate the usual approaches "batch and queue" mentality and introduce new processes where the delivery is regulated by the down-stream process
5. Strive for perfection - you know that your organization reach the true Lean state only through continuous re-evaluation of its activities.

To access the Lean status the basic information is from the Value Stream Mapping (VSM).

The Kaizen is one of the tools for developing business processes. Kaizen, the Japanese way of thinking and it means continuous improvement. According to Imai (2012) the Kaizen means improvements, and continuous improvement in private life, family life,

social life and the work environment, too. When it is applied to the workplace environment, Kaizen means continuous improvement involving everyone as a contributor managers and workers alike. The essence of the Kaizen: there's a point in business process what it can improve. If we can find the bottleneck and we can improve on it we can ensure our company development.

Many people tend to confuse the Kaizen to the problem solution. Kaizen means: a continuously change on a stable operating process to improve the activity.

Kaizen is a small investment by small changes to improve the existing process. For example: replacing two machines side by side and it eliminates the material handling losses.

Kaizen is customer people and process-oriented and in small increments development in all areas and by everyone on a daily basis.

In the Kaizen management system information flows faster than the pyramid type (western style) systems where the flow of information and feedback at each level can be jammed or distorted. The development and the decisions start from the bottom to up because the daily problem solving guarantees the company surviving.

The most basic quality improvement method is the Japanese 5S and it can be used as an element of Kaizen.

The is a 5S rigorous approach to management that provides accurate and disciplined approach to secure clean and efficient working environment, maintain, develop the necessary rules.

The 5S provides the working environment, sound and purity of which results in a simpler and more transparent workflow with continuous quality improvement. By 5S activity the problems can be identified sooner.

The methods acronyms mean (Osada, 1991):

- 1S- SEIRI (sorting, grading): the necessary and not necessary items need to be separated! On the work area may only items what are needed for the job!
- 2S – SEITON (placement, layout and marking) the used devices must be specified place and after use they have to put there. The devices are spatially arranged according to the frequency of use!
- 3S – SEISO (cleaning and inspection): the workplace and their environment the plant and equipment must be keep clean and must be maintained! The disorder may be noticed only in a clean environment!
- 4S – SEIKETSU (standardization and self-discipline): Keep the workspace in the best condition, the eliminate the defects immediate. Standardize the 5S activity, Rules for maintaining of 5S.
- 5S – SHITSUKE (morale, attitude, diligence, education) full compliance with the rules, full participation and good attitude, personal accomplishment of the tasks and responsibilities, communication and feedback, continuous improvement.

There is one more S. It is 6S – SHUKAN. Calls for the delivery of improved knowledge.

Another method of reducing the corporate losses and the quality improvement is the Value Stream Mapping (VSM). VSM helps to find out the right quality improvement method. The VSM's aim is to determine the location of the value creation process and

places. The Value Stream Mapping includes the company's processes the value-added and non-value-added processes, too. By the mapping process, VSM classifies and quantifies the value generating processes points, classifies and quantifies the losses in the process, shows the flow of value and information.

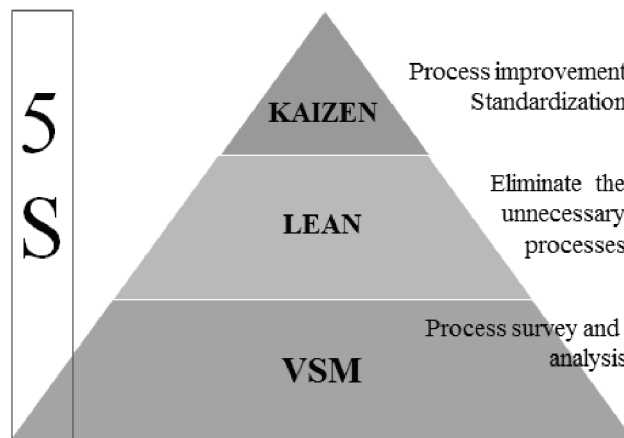
The VSM helps to create the Current state map that describes the current processes. After the exploration of losses it can be described the improvement points and opportunities. The final result of the VSM is the Future map and it shows the improved optimal state of the processes. The quality improvement methods (Lean, Kaizen, 5S, VSM) are interrelated (Figure 2).

The VSM mapping is suitable method for analyzing the processes and information and the VSM map determine the Lean and Kaizen actions.

The Lean aim is to eliminate the loss-making processes and to maintain the valuable processes. The Kaizen ensures the keeping of the valuable processes and the 5S is the basic method of the productivity improvement (Figure 2).

Due to the joint application of the productivity improvement methods the valuable processes can be fixed. The standard helps to follow the production processes and it helps to keep the knowledge at the labour migration.

**Figure 2: The quality improvement methods and their connections**



Source: own design

## Results

Any accounting system's basic requirements are the reality neutrality and the completeness.

The information (data) must be accurate, realistic, enough and the relevant information must be available at the right time and place.

The abovementioned requirements can be ensured by quality improvement methods. In the accounting system, we can approach these requirements by using the quality improvement methods:

1. accounting process
2. the accounting information quality

### ***Results by process approach***

In the process approach, we have to think about the organization of the accounting processes.

The accounting activities primarily office-going process and it means to optimize the activities in the office.

In fact, the office procedures imperfections cause 70-80% of the other process losses.

The Value Stream Mapping is the tool of the accounting administrative processes survey.

The method reveals the accounting recording process itself, determines the valuable and non-valuable process analyses the process step-by-step.

Of course what is valuable or non-valuable process it depends on the information requirements. The information requirements of financial accounting are decided by “outside” regulations (law, financial reports, principles etc.). The information requirements of management accounting are decided by company’s management itself. The VSM is the method to find out these information requirements.

After the VSM comes the introduction of the Lean. It has to eliminate the valuable and non-valuable processes from the system. The tool is the Lean Office. By the Lean Office it is possible to make clear and efficient office processes. There are 35 losses in the office categorized into five groups:

- 7 mail losses
- losses of information
- other process losses
- human resource losses
- psychical environment losses

The main aim is to eliminate the office losses from accounting processes. In parallel to the Lean office has to implement the 5S. The office 5S activity and the results are in the Table 2.

Implementation of 5S activities can point to further weaknesses in administrative processes and provide a basis and also re-tool system, as does the implementation of the Kaizen activities. The Kaizen can help us to achieve the result in small improvements.

Kaizen processes resulting from the business relationship of the administrative office accommodation can be arranged rapid flow of information between various departments (divisions). The physical transfer of documents labelling transportation scheduling may also increase efficiency. The organization of documents’ movement can decrease the usage of human resources.

The development of Kaizen possibilities in the accounting process are depending on the procedure and the willingness of workers.



*Table 2: The office 5S activity and results*

5S	5S activity	5S results
1S- SEIRI (sorting, grading)	Remove unnecessary objects and documents. Unwanted e-mail selection, unnecessary bills and receipts destruction, removal unnecessary old forms. Removing unnecessary bad old office supplies (pens, devices, etc.).	Only necessary and sufficient documents and tools remain in the workplace.
2S – SEITON (placement, layout and marking))	The workplace physical and ergonomic design (chairs, tables, based on frequency of use and availability of equipment), marking the location of objects. Documents folders organization, labelling, marking based on function and remit. Indication of the dossiers of documents based on the real path of process (VSM). Determination codes, taking into account the origin and use of information (documents). (E.g.: colour codes and text use.)	Transparent jobs by the assets and documents.
3S – SEISO (cleaning and inspection)	Cleaning what means making a clean job. Physical examination of the tools the computer printer (maintenance - long-term and operational tools to work). Continuous status monitoring. Keep clean documents and in excellent condition to archive.	Clean working place, working tools.
4S – SEIKETSU (standardization and self-discipline)	The intelligent use of first 3S. Developing standards based on visible markings connected to the workflow. Create documents, compliance and monitoring the usage of the standards (attendants). Creating and conscious application (permissions, remittance, data and information flow) of checklists.	Standardized (controlled) process, what is understandable for everyone.
5S – SHITSUKE (morale, attitude, diligence, education)	The system is designed to maintain awareness, workers encourage the incorporation of the 5S corporate culture. Full enforcement of the rules. My responsibilities and duties to fulfil. Communication and feedback. Continuous development.	Workers with higher levels of morale it ensures effective and quality work.

Source: own design

### ***Results by the accounting information quality approach***

The accounting (management) systems are continuous and interactive connection with the corporate management. The evaluation of processes, the effectiveness and the decision making itself will only be effective and forward-looking information based on the reality. If we are looking the reality of the accounting information, we have to start from the basic aim of the accounting: recording the real economic events. The accounting is the entrepreneur's processes in the office.

Why is the VSM the tool of the reality of accounting information?

VSM is suitable to the real mapping of the processes and it suitable to write down the production and service processes. On the VSM map, you can point to the information points in the processes for the accounting and it is possible to make a manual.

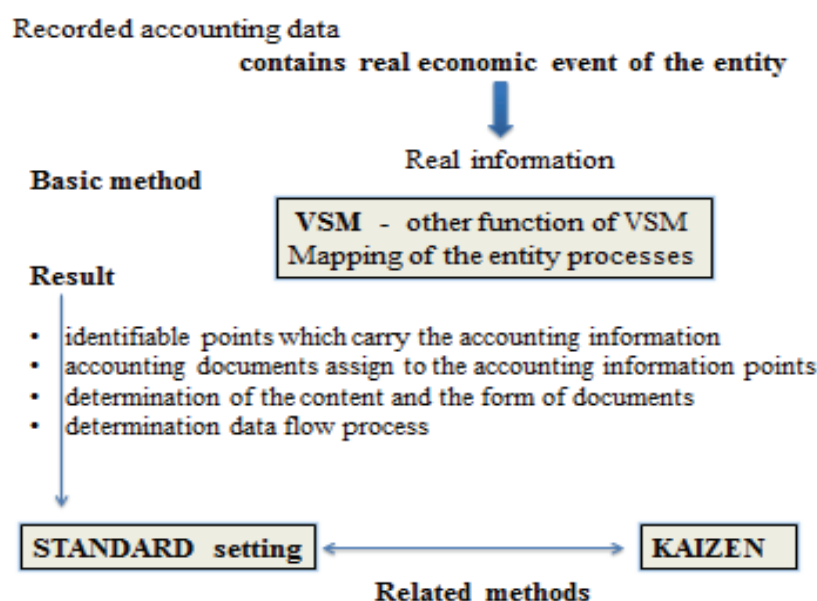
This manual contains

- the information points in the processes
- the basic documents
- the types of information and data
- the flow of information
- the registration place of the data.

In this case, the VSM function is not the "classical" VSM function but also the VSM specify a way for the real and deficit-free accounting registration.

After the standardization of the accounting data flow it is needed the development. The reason of the development the entity activity changing (it is independent from the accounting system – it is coming from the production changing) and the most real accounting flow standard making. The tool for the accounting flow development is the Kaizen (Figure 4).

**Figure 4: Results by the accounting information quality approach**



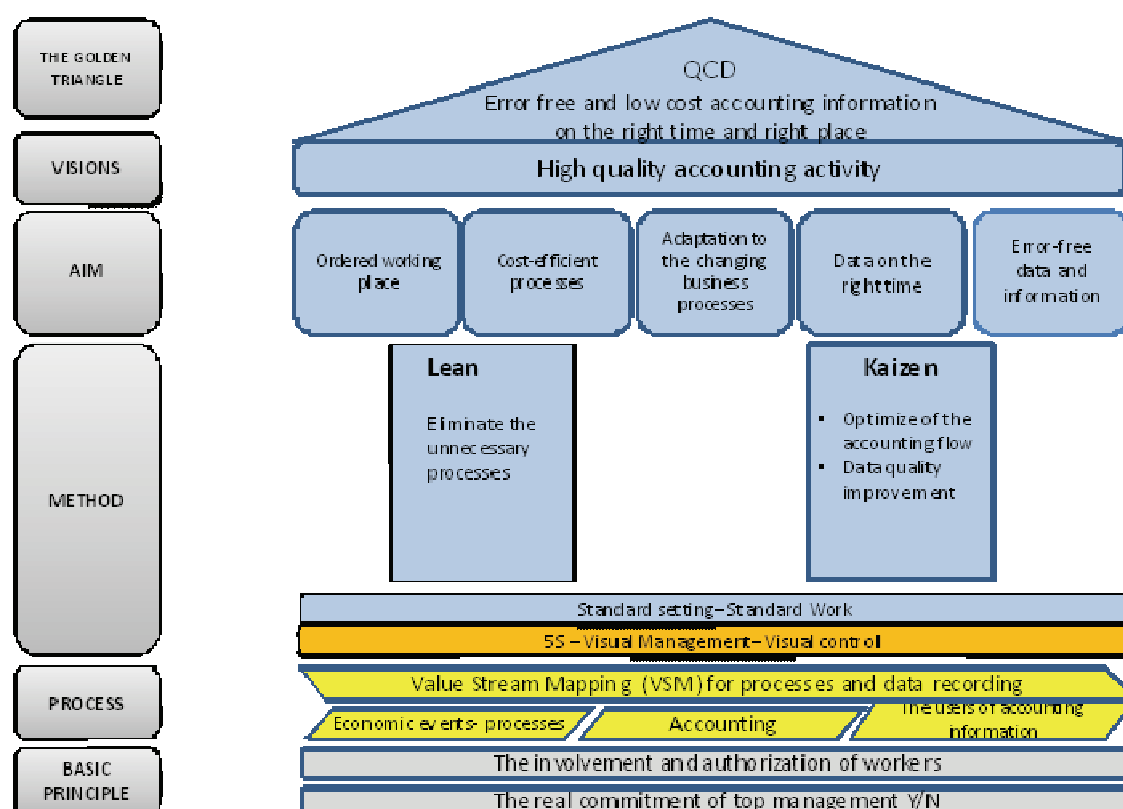
Source: own design

## Conclusions

The information quality from the accounting system can be increased by the quality improvement methods. By the quality improvement methods can be reduce the administrative costs and it will be more efficient the creation of the information.

The reliability of the accounting processes and data can be increase by the application of VSM, Lean, Kaizen and 5S methods. All this is summarized in Accounting Quality House (Figure 5).

**Figure 5: The Accounting Quality House**



Source: own design

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### **3.2. NEW WAYS OF EUROPEAN BANKING REGULATION AND DEPOSIT INSURANCE**

#### **Summary**

The crisis in 2008 resulted in significant changes in banking regulation just as in all fields of economy. The business activities of the greatest banks encompass the whole world. It is not easy to follow these complex connections and to observe the regulations. The infectious effect of the systematically important financial institutions (SIFIs) may endanger the whole bank system. Such banks are able to drag down even the economies of the countries in which they operate. This is why it is important to apply more stringent regulations to banks than to other businesses. The Basel rules, the latest EU regulations and the bank union itself have been created also for this purpose. In our study, we shall present changes in the field of the EU bank regulation, which tends to become rule-based rather than risk-based. We discuss how the latest regulations shape the operation of the sector. Naturally, there are opponents to bank regulation. The so-called free banking means, in fact, that the regulation of the banks is based on the market, the managers are aware of the risks they take, and therefore they are able to react to the economic shocks in due time, and ultimately, they take it for granted when they are bailed out by the central bank which supports them. Nevertheless, bank regulation has been continuously developing and supplemented with new elements in the recent years, and experiences show that such a regulation is really necessary.

**Keywords:** banking regulation, SIFIs, bank union, free banking

#### **Importance of Banking Regulation in the European Union**

The various financial institutions, including banks, insurance companies, institutional investors, are closely related. The banks get close to the operators of the financial life via the various payment systems, and therefore if a bank has liquidity problems and subsequently becomes insolvent (on a long term) then it will affect all institutions being in connection with it. This is called an infection effect when the problem causes a severe crisis in the whole financial system, which means that much more stringent rules should be applicable to the financial institutions than to traditional businesses. We would believe that the necessity of banking regulation is clear, however, even economic specialists do not agree in this matter. Many refer to the significant costs of state interventions which are financed from the taxpayers' money in the case of a

bankruptcy. At the same time, on the basis of so-called free banking, banks should operate on the basis of the regulatory mechanism of market, as in the case of other business, which would result in much less costs.

“Free banking is, in fact, a limited presence or even lack of banking regulation; money creation, more closely its regulation or non-regulation is decisive within regulation. This approach questions the necessity of central banks and is based on absolutely proper decisions of the banks, the full applicability of the *laissez-faire* principle.” (Zsolnai, 2012)

In our opinion, the managers of the financial institutions are fully aware of the extent of the risks assumed by them. They know that keeping of the confidence of depositors is the most important task, and therefore they spend much on protection against the occurrence of unfavourable events.

The Union’s banking regulation contains guidelines and regulations. The member states have to transpose the guidelines into their national legal framework, while the regulations are mandatory for all countries.

The banking regulation within the Union has been divided into two parts until now:

- the regulatory level of the national authorities which regulates the operation of the financial institutions in accordance with the national specificities in all countries, and
- the directives of the European Union, which are mandatory but are transposed by the countries into their own legal framework in accordance with the national specificities.

The Single Rulebook is intended to change this division by providing uniform rules in each member states by means of regulations and standards issued by the European Banking Authority (EBA).

The Single Rulebook sets capital requirements for the banks, provides a higher level of protection for depositors, and helps to prevent bankruptcy situations and to manage bankrupted banks.

Regulation related to the banks can be divided basically into two groups:

State regulation covers deposit insurance and the function of the central banks as a lender of last resort to commercial banks. More closely, the purpose of deposit insurance is to protect the depositors, to ensure confidence in banks and thereby to protect the financial stability of the country.

The central bank’s function as a lender of last resort (LoLR) means that the central bank may grant credits to insolvent banks. This entails the problem of a moral risk, which is that larger banks dare undertake risky transactions as they are sure that the central bank will help them. Therefore the banks must meet various conditions to be able to receive such credits, for example only illiquid banks may receive last resort financial assistance, the price of which is higher than the market price. It is important to note that in the case of a bankruptcy, in addition to the costs of the state's role the costs of losing the confidence of clients are also high and appear on a long term. Regaining the confidence of depositors needs much time and effort.

The prudential regulation is the other group. It is intended to enable the bank to keep its long term solvency.

Mishkin distinguishes eight types of prudential regulation (Erdős et al. 2010):

- restrictions on maintaining assets and activities,
- separation of banking from other financial activities,
- competitive constraints,
- capital rules,
- risk-based pricing of deposit insurance,
- requirements of publication,
- requirements of authorisation,
- continuous control of compliance with the regulatory requirements.

In the recent years, most of the rules have become less significant due to the liberalisation of the financial markets, globalisation, the free capital flow within the European Union. By now, the geographic limitation of opening of a bank has been terminated, resulting in a much less transparent system. The regulation tends to move from risk base regulation to rule base regulation in the whole world, and is supplemented with the regulation of system risks. This will rearrange the relations between the states and banks, the European Central Bank and other Union institutions as well as the member states of the euro zone and non-euro zone Union countries.

### **Micro- and Macprudential Regulation, System Risk in the Banking sector**

The necessity of micro- and mainly macroprudential regulation has an increasing priority at international level. The first is intended to protect the depositors and to reduce the probability of occurrence of bankruptcies. While the macroprudential regulation is intended to minimise large scale system level risks. The characteristics of these two types of regulation are summarised in the first table.

***Table 1: Characteristics of Micro- and Macprudential Regulation***

<b><i>Designation</i></b>	<b>Characteristics of microprudential regulation</b>	<b>Characteristics of macroprudential regulation</b>
<b><i>Purpose of regulation</i></b>	reduction of the probability of individual bankruptcy	reduction of the system risk, minimisation of the resulting costs
<b><i>Focus</i></b>	individual institutions	the whole bank system due to the correlating risks
<b><i>Ideology of regulation</i></b>	the system remains stable as long as all individual institutions well function	the problem is not the bankruptcy of one institution
<b><i>Principle of regulation</i></b>	bottom-up: requirements set for a representative institution are valid for everyone	top-down: it departs from the probability of the occurrence of a crisis
<b><i>Method of regulation</i></b>	uniform standards	individual rules depending on the economic weight of the institutions
<b><i>Idea about economy</i></b>	exogeneous variables: they are specific for the individual institutions	endogeneous variables: the result of the joint behaviour of the individual institutions

Source: Lublóy (2003) p. 74

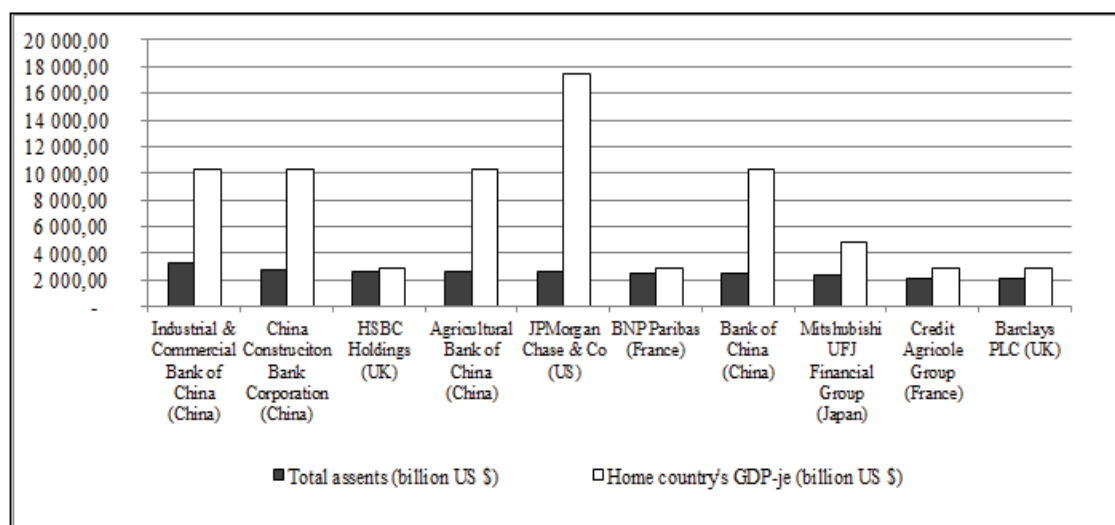
The attention to the lack of the macroprudential regulation of banks was called by the financial crisis. In the narrow sense, system risk means that a specific event affecting first only a narrow part of the economy adversely influences also other economic fields after a while. In its broadest sense, the event has a severe effect on several institutions and markets. The event is weak if no institution goes bankrupt as a result of the shock. It is strong if even only one institution goes bankrupt, which could not have happened without the shock (Lublóy, 2003).

There are two types of risks in the case of banks. The individual risks affect only the bank concerned, while the system level risk has an influence on the financial system as a whole and thereby also on the whole economy. Such economic operators are called Systematically Important Financial Institution (SIFI).

Today, new terms appear in connection with this topic. The principle of “too big to fail” is replaced by the principle of “too big to save” to an increasing extent, that is the most giant banks are now too big to save. Banking regulation has moved into this direction. The economic capacities of the countries do not allow them to allocate enormous amounts to the saving of financial institutions and thereby to risk the stability of the country.

Figure 1 shows the 10 global systemically important banks (GSIB) having the largest assets. Based on the report of November 2014 of the Financial Stability Board, 31 such banks operate currently in the world.

**Figure 1: The Greatest Banks of the World (2014)**



Source: own edition on the basis of the data of the websites of the Realbank and Economy Watch

There are four Chinese banks and one Japanese bank among the first 10 ones. The first ICBC was only the 32<sup>nd</sup> on the list in 2004, and was already among the 10 best ones from 2006, and became the first one from 2013. Though the seat of the third largest HSBC Holdings is in the United Kingdom, most of its incomes come from the Asian



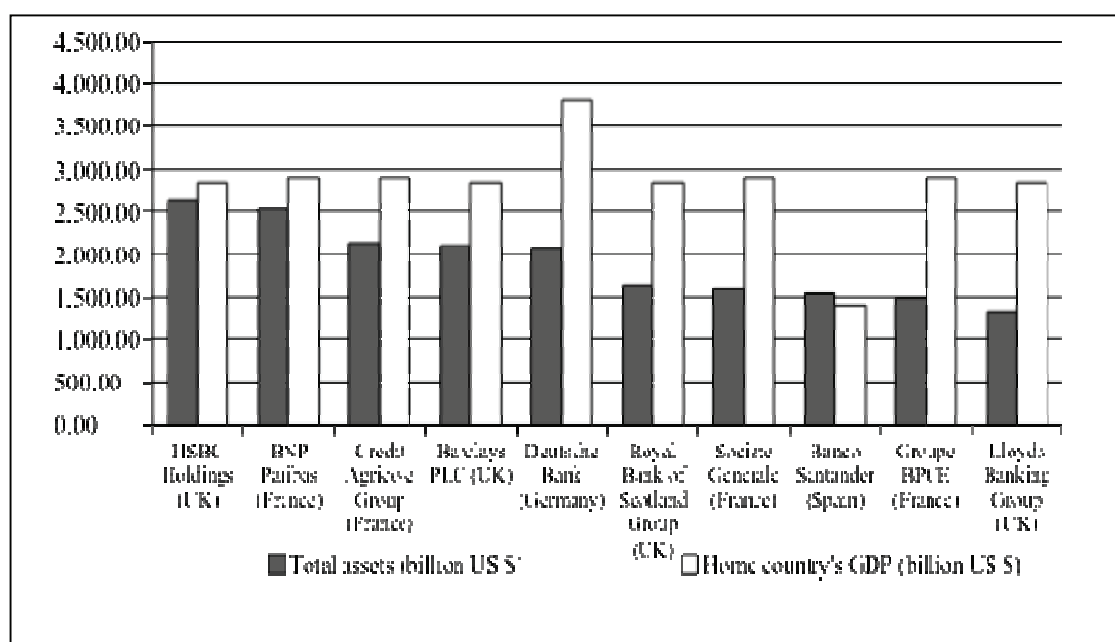
market. JP Morgan Chase is the largest bank in the United States. In addition to them, the top ten include the French BNP Paribas, Credit Agricole and the English Barclays. Compared to their GDPs of the countries, the European banking system is larger than the American one. The balance sheet totals of the large European banks are not high compared to the European GDP, but are enormous compared to the national incomes of their own countries.

The figure well illustrates that the GDPs of China, US and Japan are enormous, and the balance sheet totals of the banks are insignificant compared to these values. However, the difference between the assets of the largest European banks and the GDPs of their home countries is not so significant at all.

Figure 2 contains data for 2014, based on which the English HSBC Holdings was the greatest bank in Europe. The 8<sup>th</sup> largest bank, Banco Santander had assets exceeding the GDP of Spain.

Among the 10 largest European banks, 4 are located in the United Kingdom, 4 in France, one in Germany and one in Spain. In 2014, the balance sheet totals of all banks exceeded 50% of the GDPs of the countries where they had their seats, and 7 banks had assets exceeding 10% of the GDP of the EU. It is still not clear for the decision makers of the EU what will happen to those TBTF banks that are too big to save. The separation of the classical and commercial activities of the banks has been recommended to solve this problem, on which discussions are being held.

**Figure 2: TBTF Banks in Europe (2014)**



Source: own edition  
on the basis of the data of the websites of the Realbank and Economy Watch

### **Basel Bank Rules (Basel I, Basel II, Basel III)**

The internationalisation process of the banks started in the second half of the 20<sup>th</sup> century. Due to the accelerated globalisation and integration, establishment of uniform regulation has become necessary in the banking sector. In 1974, the Basel Committee on Banking Supervision (BCSB) was created with the involvement of 13 countries, which has an advisory role, and its recommendations may be adopted and applied by the member states and other countries.

The Based Accord established in 1988 is the most important measure of the Committee, which specified a minimum capital level for the banks. They specified the definition of solvency margin, which represents the bank's equity and the resources which may be included in the settlement of payables by the credit institution as a capital.

The principle of operation of the credit institutions is that they must continuously maintain their liquidity and solvency. The solvency rate is intended to guarantee the solvent operation of the bank, and its current value is 8, which means that the solvency margin must be higher than 8% of the risk-weighted assets.

The Accord has been criticised from several aspects, for example because identical risks weights were valid for companies listed in the stock exchange and for family businesses. Several supplementations were attached to Basel I, but they were not sufficiently effective.

Basel II was created in its final form in 2006. It laid a greater emphasis on the risk management processes, was more flexible, and took into consideration also the operational risks in addition to the market risks. It required the maintenance of capital reserve sufficient to cover the expected risks. It emphasised that the solvency margin was to be considered the difference between the available and the necessary capitals. The Accord was well accepted. Almost simultaneously with Basel II, rules relating to capital requirements known as the Capital Requirement Directive for Credit Institutions and Investment Firms (CRD) were created. While the first was a proposal applicable only to internationally active banks, the CRD is mandatory for all credit institutions and investment businesses operating in the Union.

In 2013, CRD IV Directive and CRR Regulation adopted by the European Parliament jointly replaced the CRD directives containing capital requirement regulation of the credit institutions and investment businesses. The CRR Regulation and the modification of the CRD IV Directive came into effect as of 1 January 2014. The regulation is mandatory for the Union countries, while the directive is to be only transposed into their legal framework. The tightening of the solvency margin capital requirements is a new element, which was required due to the crisis in 2008, since previously risky elements were also included in the capital resulting in its dilution, and therefore the financial institutions had to create also anticyclical and capital maintenance reserves. From 2015, the banks must publish their data (Kiss, 2014).

Basel III was published in 2009 and finalised in September 2010, which contains significant changes, in particular, in the solvency margin elements. All G20 countries recognise it as binding, i.e. it is created as a global standard (Szombati, 2012). The

regulation introduces the term of leverage ratio which is the ratio of the common equity and all exposures. The specified value is 3%, which must be reached from 2018. The Basel Committee on Banking Supervision has worked out quality and quantity indexes to qualify the global systematically important banks (GSIBs). These banks were classified into five groups on the basis of their systemic risk effects, and surplus capital requirements were assigned to the individual categories (2.5% as the highest) the adherence to which gradually becomes compulsory between 2016 and 2019 (Mérő, 2011).

The introduction of new indexes is the greatest change, since the previous Basel directives did not contain requirements for the liquidity levels of the banks.

In accordance with the first proposal, the banks have to possess liquid financial assets for at least 30 days. The LCR (liquidity coverage ratio) is an index necessary for its calculation. It was introduced in 2015, which means that 60% of the assets of the banks have to be liquid assets good enough to be involved in crisis management for 30 days. This value has to be increased by 10% per year in order to reach 100% by 2019.

In accordance with the second proposal, the bank's balance structure must allow independent operation on a long term, i.e. the permanent sources must exceed the rate of liquid sources. It is calculated with the NSFR (net stable funding ratio) index, and it is planned to be introduced in 2018.

#### **New Regulatory Framework: the European Bank Union**

The bank union is part of an integrated financial framework, and is also a response to the financial and economic crisis, which was specified when it became clear that an intensive reform was needed to eliminate the regulatory and supervisory deficiencies.

The bank union is based on three pillars:

- Single Supervisory Mechanism (SSM),
- Single Resolution Mechanism (SRM),
- Deposit Guarantee Scheme (DGS).

Adherence to the capital requirements related to banks (CRD IV) and to the directive on the recovery and resolution of banks is added to the three pillars.

The single supervisory mechanism (SSM) considered the first pillar of the bank union was assigned to the scope of the European Central Bank from 1 November 2014. It means, in fact, the supervision over commercial banks belonging to the euro zone is assigned to the scope of the ECB. This means currently 124 banks and more than 80% of the assets. Banks managing financial assets above 30 billion euro or having assets above 20% of their country's GDP are under control.

Based the Union's stress test made in October 2014, OTP Bank meets this condition in Hungary. In 2014, 76% of the bank deposits available in the European Union were owned by banks seated in the euro zone, and this is one of the reasons a more intensive supervision is reasonable (EBF, 2014.).

The second pillar, the single resolution mechanism means, in fact, that banks close to bankruptcy are not saved from the money of taxpayers, but the responsibility must be assumed by their shareholders and creditors. The single resolution panel on which the

single resolution mechanism (SRM) is based started to operate in Brussels on 1 January 2015. In all Union countries, national resolutions funds have to be created, and from January 2016, these will be replaced with a single restoration fund, and from that time the banks will pay 1% of the secured deposits into it. The estimated amount of the paid contributions will be EUR 55 billion by the end of the period, i.e. 2022, or even higher if non-euro zone countries also join meanwhile.

The deposit guarantee scheme (DGS) is an important element of the bank union, since with its rules it may contribute to the restoration of the confidence of depositors in the financial institutions. In April 2014, the latest decision on the regulation of the third pillar was made, which must be transposed by the member states into their practice by 3 July 2015. It is a new element that the credit institutions must pay a fee on deposits subject to compensation obligation by 31 December preceding the subject year.

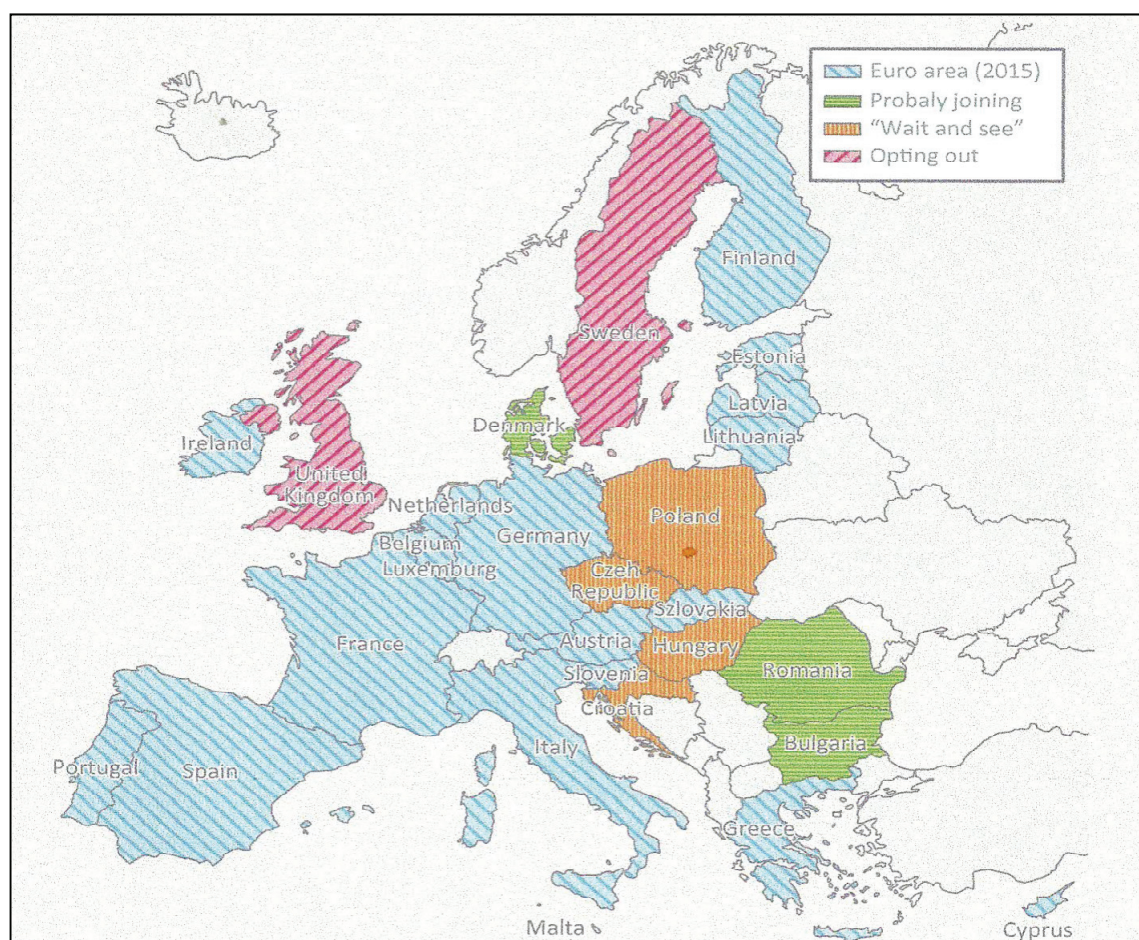
Bonds and deposit certificates issued by the credit institutions are removed from elements protected by deposit guarantors, but from now a compensation limit of EUR 100,000 is applicable to community deposits, and local governments with budgets less than EUR 500,000 are protected by deposit guarantors. Now, 20 banking days are available for payments, but in accordance with the Union's requirements, this period must be gradually limited to 7 banking days until 2024.

Currently 19 euro zone countries are members of the bank union. The remaining 9 countries have different opinions on joining. Since the idea of the single supervision, Great Britain has been emphasising that they do not want to expose their banks to control by the ECB due to its special situation in the financial sector. Sweden has a similar viewpoint. 3 Union countries, Denmark, Romania and Bulgaria are for joining, but have not yet indicated their intention. Our country, the Czech Republic, Poland and Croatia joining in 2015 are currently waiting.

In accordance with the study made by the National Bank of Hungary in 2014, the crisis management fund of EUR 55 billion is a definite advantage of joining, which may contribute to the financing of bank bailouts. Belonging to a larger risk community, precise knowledge of the rules and involvement in decision making are all arguments for joining the bank union.

Due to power modification, a new entry wave and thereby an increased market pressure, our country may decide to join earlier than it planned to do so. At the same time, there are several error possibilities in the system, new elements may be introduced after a while, and therefore our country is still monitoring the events from the background.

**Figure 3: The Relations of the EU Member States with the Bank Union**



Source: National Bank of Hungary (2014)

The formation of the system has been preceded by a long process, as nearly 8 years have passed since the crisis. The bank union will surely be in the focus of discussions between the decision-makers for a long time, as certain rules will be introduced with periods of grace, and the EU countries will gradually join, i.e. the final formation of the bank union will last for several years. Though none of the countries wants it, but the operability of the system could possibly be evaluated and really studied in another crisis.

## Conclusions

The quantitative regulation characteristic of the 1970s has been replaced with risk based approaches by now, i.e. the economic importance of the banks depends not only on the volume of deposits but also on the risks entailed by them.

Safe operation of the banks is in the interest of all operators of economy. Prudent operation is important due to the increase of deposits primarily from the aspect of the



inhabitants, which finally affects consumption, production and ultimately the economy as a whole.

The major problem with state assistance is that they use the money of taxpayers to bail out banks instead of spending money on the creation of proper protection systems and using the money first of all of shareholders and creditors to solve the problem. Today, large banks expect the state to bail them out, and therefore they are inclined to invest the savings of people in assets involving high risks. This way of thinking endangers the operation on the economy. The crisis of 2008 has called the attention to the deficiencies in the banking regulation and to the resulting problems. Due to the complexity of connections and to the risk of any negative consequence's becoming an international one, it is difficult but indispensable to find a proper solution which may result even in additional expansion of banking regulation at international level.

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Zahri HAMAT

### 3.3. HARMONIZATION OF BUSINESS ZAKAT AND TAXATION IN MALAYSIA

#### Summary

This paper aims to examine the relationship between business zakat and taxation in Malaysia according to the Income Tax Act 1967. In Malaysia, there are two methods of business zakat accounting, namely, the adjusted working capital method and the adjusted growth capital method. Both methods of business zakat accounting use data from the balance sheet, whilst business taxation gains information from the income statement. However, the question often raised is that, if the business zakat accounting depends on those methods, how entrepreneurs are able to harmonize business zakat and income tax imposed on them? The findings of the research revealed that entrepreneurs are allowed to use any methods that deemed fit and appropriate with their types of businesses. In addition, they also have the option to use business zakat accounting method that based on income in accessing the business zakat.

**Keywords:** harmonization, business zakat, taxation, working capital, growth capital

#### Introduction

Obligation of zakat on business is derived from the Qur'an and Sunnah of the Prophet Muhammad. Allah says, "O you who believe! Spend of the good things which you have earned..." (al-Baqarah, 2: 267). Imam al Tabari comments, "Pay *zakah* out of the good things you earn in your economic activity, such as business, industry, or gold and silver, "He also reports through several chains, from Mujahid, that the words "good things you have earned" means by making trade. Imam al Jassas, in his *Ahkam al Qur'an*, says "It is reported that a group of our predecessors explain God's words "good things you have earned" as through trade. These include al Hasan and Mujahid. Imam Abu Bakr Ibn al 'Arabi says that "Our scholars interpret the words of God 'that you have earned' as things earned by means of trade (Yusof al-Qaradawi, 1999). Abu Dawud reported from Samurah Ibn Jundub, "The Prophet used to order us to pay the *sadaqah* (zakat) on what we have prepared for the trade"<sup>2</sup>. There is also a report from Abu 'Amr Ibn Hammas, from his father, who said "Umar passed by me and said,

<sup>2</sup> Reported by al Daraquani, p.214, and Abu Dawud via Ja'far bin Sa'd from Khubaib Ibn Sulaiman bin Samurah from Samurah, Abu Dawud made no comment, nor did Al Mundhiri. See *Mukhtasar Al Sunan*, Vol. 2, p.175. Ibn al Humam says this means they approve the saying, as in *Al Mirqat*, Vol. 4, p.158, Multan Print. Ibn 'Abd al Barr grades it good. See *Nasb al Rayah*, Vol. 2, p. 376. Al Hafiz says in *Bulugh Al Maram*, p.124 that "its chain is soft." Ibn Hazm claims that Ja'far, Khubaib and Sulaiman are unknown. Ahmad Shakir writes in his footnote on p. 234, Vol. 5 of *al Muhalla* that "They are known, they are mentioned by Ibn Habbab as among the trustworthy". Al Dhahabi quotes Ibn Al Qattan, the trustworthiness of either of them is not determined, in spite of efforts made by critics of hadith. This chain has a few other similarities in its vagueness. Abd al Haqq al Azdi says Khubaib is weak and Ja'far is not dependable. Anyhow this chain is dark and does not stand. See *Al Mizan*, Vol. 1, p.150 (see Yusof al-Qaradawi 1999).

‘Oh Hammas, pay of your possession (wealth)’. I said, “I have nothing except hides and bags. He said, “Determine the price of these things and the pay their zakat” (Abu ‘Ubayd, 1991).

In Malaysia, there are two methods of business zakat accounting, namely, the adjusted working capital method and the adjusted growth capital method. Both methods of business zakat accounting use data from the balance sheet, whilst business taxation gains information from the income statement. However, one might debate that if the business zakat accounting depends on those methods, how entrepreneurs able to harmonize business zakat and income tax imposed on them?

The main objective of this paper is to explore the practices of business zakat accounting in Malaysia particularly after the Department of Islamic Development Malaysia (JAKIM) published *Panduan Zakat di Malaysia* (Malaysia Zakat Guide) in the year 2001. Department of Islamic Development Malaysia (JAKIM) is a Malaysia Government institution which has a vision to assist in the creation of a progressive and morally upright ummah based on Islamic principles in line with the Malaysian vision through an efficient and effective Islamic Affairs Management organization. This paper also aims to harmonize the implementation of the current practices of business zakat accounting for tax deduction from the aggregate income of the business. To accomplish the above objectives, the structure of this paper is divided as follows. Part 1 deals with the development of business accounting in Malaysia. Part 2 discusses the tax deduction for zakat on business income paid by companies. This paper concludes with Part 3, which examines the alternative business zakat accounting method that can be harmonized by the companies in the assessment of their business zakat.

### **Business Zakat Accounting in Malaysia**

The original text on business zakat accounting has been identified to rely more on inventors or goods for trade. However, this premise is no longer undisputable since the scope of business zakat fundamental has been redefined by Muslim jurists. They have broadened the scope of goods for trade (*urud tijarah*) to working capital used in business operation.

Abu Ubayd reported from Maimun Ibn Mihran as saying, “At the time of your payment of zakat, estimate your cash and commercial good, determine the price of your commercial goods in cash, the remaining is your debts from your customers (with the opinion that it will be collected) and minus your own debt, and then pay zakat on the balance” (Abu Ubayd, 1991).

According to Mohamed Abdul Wahab et al. (1995), in Malaysia there are three methods of business zakat accounting which are being practiced in various states and institutions in Malaysia. The first method comprises only the current assets, i.e. cash in hand, cash in banks, accounts receivable, and stocks or inventory. Through this method, the value of stock is stated at cost as being practiced by the Bait-al-Mal of Perak, Kedah, Wilayah Persekutuan and other States. Nonetheless, successful efforts have been made by the authorities to streamline these methods. There are two methods

that can be used, first is the growth capital method, and second is the working capital method.

The second method consists of current asset and profit from investments. Two institutions, i.e Bait-al-Mal of Perlis and the Pilgrim Management Fund Board have been identified to practice this method which considers the stock value at the current market prices. The third method is the difference between current assets and current liabilities which called networking capital, and added to the profits for the year. This method is only adopted by Bank Islam Malaysia Berhad.

To be more specific, The Department of Islamic Development Malaysia (JAKIM) has published a book in the year 2001 entitled *Panduan Zakat di Malaysia*. According to this book, there are two recommended methods of business zakat accounting to be applied. The first method is *urfyyah*. This method is also known as the adjusted growth capital which considers the equity of ownership in a particular company and other financial sources.

The equation is as follows:

$$\text{Equity} + \text{Long Term Equity} - \text{Fixed Asset} - \text{Non Current Asset} \pm \text{Adjustments}$$

Second is the *syariyyah* method. This method is also called the adjusted working capital. It considers current assets and deducts current liabilities and the necessary adjustments by adding or deducting clarified items as given by this equation:

$$\text{Current Asset} - \text{Liabilities} \pm \text{Adjustments}$$

Differentiation of both methods can be demonstrated by the equation below:

$$\text{Equity} + \text{Long Term Liabilities} - \text{Fixed Assets} - \text{Non Current Assets} = \text{Current Assets} - \text{Current Liabilities}$$

Both methods have the same resulting answers which are derived from the same balance sheet. However, most of the states in Malaysia use adjusted working capital method. Being aware of this, three categories adjustment are needed. First is the deduction from current assets. In this case, non-permissible item, limited ownership and non-productive current assets are example of useful item to be considered. Detail items is, firstly, items that not zakat obligated - these items have to be withdrawn from zakat calculation such as items and non-permissible products i.e riba', gambling and liquor. Secondly, limited ownership – water, telephone, electrical and its similar kinds of deposit shall be deducted as it does not comply to the requirements of full rights. Thirdly, financial debtors - any loans will be imposed zakat on the debtor based on the criteria that full ownership of the asset is transferred to the debtor. The debtor has the authority and freedom to manage the money for any purpose to gain benefits from the loan. Fourthly, no item that will be imposed zakat twice – the dividend value that has been paid zakat by the investment company will be excluded. Fifthly, the current asset must be productive - bad debts, dormant stock, obvious downtrend and permanent must be deducted. Sixthly, charity-based funds - funds for the purpose of charity such as education that is located in the current assets will be exempted from zakat. Lastly,

stock inventories – only finished products will be zakatable but raw materials and work in progress work will be exempted.

Second is the addition to current assets. All donations for charitable purposes and purchases on fixed assets are done at the last quarter using internal and these items need to be added to current assets. Third is the addition to current liabilities. Current liabilities which can be deducted are only from operation in nature including trade creditors, operation payables such as salary, electricity, telephone and tax. Therefore, items such as non-operation procedure payable, dividend payable and overdraft are not allowed to be deducted and principally need to be added to current liabilities.

### **Business Zakat and Tax Deduction**

Zakat on business income paid by the Labuan offshore companies has been given as an income tax rebate. This rebate is equivalent to the amount of business zakat paid to the religious authority. It is subject to a maximum of 3% of net profit or RM20,000 which effective from the assessment year of 2004. This practice is however not applicable to zakat on business income paid by other companies until assessment year of 2005. Thereof, zakat paid by companies is allowed as a deduction subject to a maximum of 2.5% of the aggregate income excluded zakat paid by cooperatives and trust bodies. In order to accord equal tax treatment between companies and trust bodies, zakat settled by cooperatives and trust bodies is also allowed as a tax deduction. It is effective from year of assessment 2007, via section 44 (11A) of the Income Tax Act 1967.

***Table 1: Calculation of tax for the Year of Assessment 2015***

<b>Explanation</b>	<b>Example A</b>	<b>Example B</b>
Aggregate Income	RM40,000	RM40,000
Deduction: Business Zakat (maximum 40,000 @ 2.5%)	1,000	1,500
Taxable Income	39,000	39,000
Total Business Tax (39,000 @ 28%)	10,920	10,920
Tax Payable	RM10,920	RM10,920

Source: own research

The calculation of zakat deduction showed in Table 1. In Table 1, the example A showed that the payment of zakat, RM1,000 is deductible from taxable income as allowable expenses. However, the amount of the deduction allowed is up to a maximum of 2.5 per cent from the aggregate income. Thus, when the zakat payment made is RM1,500 as an example B, the deduction allowed is restricted to RM1,000 only.

Nevertheless, apparently, business zakat accounting uses data from the balance sheet, while business tax deduction gained information from the income statement. In other word, those methods demonstrate no relationship between business zakat accounting

method and tax on business income due to the different sources of information usage. If the companies suffered loss, deduction of zakat payment is not allowed.

Therefore, if the business zakat accounting depends on those methods, do entrepreneurs get benefits from the tax deduction allowable to them? Principally, zakat is payable on the business irrespective of whether profit has been earned or unearned, provided the business has positive working capital. The entrepreneurs would not utilize their benefits in two situations. The first situation is when their business suffer losses but still has a positive working capital. The second situation is when tax deduction is smaller than the amount of business zakat paid.

In this case, what modification or adjustment should be done? It actually requires the harmonization between *fiqh* and law that was currently practiced in Malaysia. According to the Mufti of Selangor State Government, Islamic scholars should be more open to new interpretations and changes of the *hukum* made which were formulated by earlier scholars especially in matters related to zakat. In fact, any changes to the section 44 (11A) of the Income Tax Act 1967 requires a lot of deliberations.

#### **Zakat Accounting, Taxation and Malaysian Scholars**

One of the options that could be done to harmonize business tax deduction and business zakat accounting method is to change the latter's method (Zahri Hamat, 2013). To accomplish this task, twelve zakat scholars in Malaysia were selected as respondents (expert) representing the three categories for survey purpose. The first category is the jurist, the second category is the economist, and the third category is the practitioner. This survey is to seek experts' opinions on whether business zakat can be charged on business income or otherwise. If the business zakat can be charged on business income, therefore, tax deduction can be utilized.

The findings revealed that all zakat scholars in Malaysia agreed that adjusted working capital was established based on the report by Maimun Ibn Mahran (Abu Ubayd, 1991). They also agreed that this method should be used, however, other methods cannot be denied. In addition, they expressed the same opinion that business zakat accounting method should not be rigid, therefore, it could be changed according to the requirement of the current situation.

Furthermore, business zakat itself is quoted as general term in the Quran and Sunnah as argued by all Malaysian scholars. To them, since *business zakat* term in both Quran and Sunnah is considered non-specific explicitness, business zakat accounting is not rigid, thus it can be changed. This view is supported by the economist. He drew a specific comment as below:

“Although we agree that adjusted business zakat accounting method should be used, but the scope of interpretation of goods for trade also is very broad. It is reasonably high time now to revisit the interpretation of the definition of good for trade.”

Business zakat accounting is established on the basis of *ijtihad* as agreed by all scholars. They are in the same opinion that one of the alternatives is business zakat

which can be charged on business income. In this case, according to the scholars, zakat on business income can be derived (*qiyas*) from zakat on agriculture yield. This opinion is in line with the affinity that business zakat accounting method can be changed according to the requirement of the current situation such as the conditions of economy and local law. For them, this is the one of highly recommended options in order to harmonize business zakat accounting method and business tax deduction currently practiced in Malaysia. Therefore, if the business zakat accounting relies on the income base, the entrepreneurs can fully get benefits from tax deduction allowable to them under the section 44(11A) of the Income Tax Act 1967.

## Conclusions

Business zakat accounting is still far to arrive at consensus or agreement from the scholars and stakeholders (Abdul Ghafar Ismail, Achmad Tohirin - Muhammad Ali Jinnah Ahmad, 2013). Nevertheless, it happened because business zakat accounting is established based on *ijtihad*. In Malaysia, the finding seems to demonstrate no relationship between business zakat accounting method and tax deduction allowable, due to the different sources of data used. On the top of that, entrepreneurs need to pay zakat on the business irrespective of whether a profit has been earned or not, provided the business possess positive working capital. To harmonized business zakat accounting method and tax deduction allowable, the entrepreneurs are allowable to use any methods, either adjusted working capital or business income based. In the case of business operation running at a loss, entrepreneurs are recommended to use business income for their business zakat accounting as being practiced in Aceh Darussalam, Indonesia.

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### **3.4. ANALYSIS OF THE HUNGARIAN BUSINESS LIABILITY INSURANCE MARKET**

#### **Summary**

Safe, stable environment and predictability are of utmost importance during the operation of enterprises. One of the possible ways of preparing to the unexpected events and decreasing future risks is the insurance. Insurance companies offer several insurance products for companies, from which liability insurances are the most relevant. In the lack of insurance, uncommon damages that touch significant amounts may destroy companies and affect negatively even the economy. Insurances and liability insurances therefore have outstanding, stabiliser role. This stabiliser role has significant effect particularly during economic crises, as it contributes to the economic growth by providing safe environment background to the recovery. The aim of the study is to shed light on the role and significance of liability insurances, by presenting the individual products of liability insurance and the possible risks of the enterprises. Also to assess the development, tendencies and current state of liability insurance market by interviewing the main actors of the liability insurance market and by analysing the aggregated market data of the past 10 years. The study highlights the risks of the currently under-insured market and that of the enterprises that have chosen low insurance limits, and the necessity of the mutual cooperation between domestic entrepreneurs and the insurance market.

**Keywords:** Liability Insurance, Enterprise Risk Management, Economic Stability

#### **Introduction – types of the liability insurance**

The managements of enterprises (especially of SMEs) are often not aware of the special features and the content of the different types of liability insurance products available on the market. In order to clarify these issues, in the introductory part of this study our aim is to define and describe the special features of liability insurance services, as well as the types and content of the most important liability insurances.

Liability risks are defined as loss exposures or loss through legal liability arising from actions of businesses (and individuals) that cause harm to others (Illés and Megyeri, 2010). This risk is considered to be one of the key risks a company faces, and the type of risk varies greatly according to the type of the activity, the size and the legal environment of the specific company. Besides the typical noninsurance risk management techniques (such as risk avoidance, loss control, risk retention), liability insurance have proven to be an effective method to protect market players against liability losses. Liability insurance is a special construct, in which the insurance

company covers the losses, damages caused by the insured (specifically the company or the manager of the company). The insurance company in this case covers the losses for which the insured is legally liable (Trieschmann et al., 2005).

The specificities of liability insurance differentiate it from other insurance lines, notably from the commercial property insurance. As you see in Table 1., these objective differences make the world of liability insurance more complex, the coverage is usually broader and the construct is loaded with much more uncertainty.

**Table 1: Main differences between liability and property insurance**

	<b>Commercial liability insurance</b>	<b>Commercial property insurance</b>
<b>Trigger event</b> (when will the insurance company pay)	All types of unlawful and harm causing behavior committed by the insured is a trigger event which is not excluded in the contract (concerning the subject to insurance coverage)	Damage of assets defined in the contract caused by specific sorts of risk (in case of the all risk coverage, the 'not excluded' sort of risk)
<b>Insured risk</b> (what will the insurance company pay)	It reimburses damages caused by the insured. It concerns insurance claims related to injuries of properties and persons based on liability insurance of third persons. The competence of the insurance is often not well-defined. Reason: human activity	Reimbursement of damages arisen in the insured property and only in case of property damages For natural reasons and/or human activity
<b>Size of claim</b> (what is the amount the insurance company will pay)	Maximum limit of compensation for the insurance company is the limit laid down in the insurance contract (but the actual damage as a maximum); costs of the legal representation have to be covered by the insurance company additionally.	The compensation is limited by the limits laid down in the insurance contract and by the value of the insured properties. The size of claim is equal to the amount of the insurance, but to the value of the damage as a maximum.
<b>Time between premium payment and claims settlement</b> (from what time the insurance company will pay)	Longer duration of proceeding. Revelation of the damage may be delayed, the payment of the compensation and the establishment of the liability may take longer period.	In general there is no/slight delay. Claim settlement is relatively fast.

Source: based on Swiss Re (2014), page 2.

Liability losses are more difficult to be estimated than property insurances as trigger events causing liability for compensation cannot be seen in advance. Furthermore, there is no such exact amount as that of the value of the insured properties, which could help the calculation of the maximum insurance amount. What is also an important difference and differentiating liability insurances from other sectors, is that the damage is not independent from the insured, as coverage concerns the damages

caused by the insured himself. In this case, it is only the insured person and his activity which helps the insurance company, but not the contracted amount (e.g. in case of casco insurance, it is the value of the car which helps the calculation). Dealing with information asymmetry and moral hazard and creating the structure of incentives are amongst the responsibilities of the insurance company.

On the other hand, the volume of damages (and the willingness of validating the insurance claim) largely depends on the legal and political environment. Nagy and Micski (2012) emphasizes that one can experience change in the attitude towards compensation which is influenced by the change in consciousness of the consumers, by the case-law concerning compensation, by the publicity of information and by the activeness of the advocates. These factors affect essentially the activeness of the customer regarding the validation of the insurance claim.

Furthermore, the duration of proceeding of the claim settlement takes longer time in general (it might take years or even decades to close a damage). Within this procedure, the occurrence of the insurance claim and reporting on the damage (whether for objective reasons or not) might already suffer significant delay (even after the termination of the contract). When a more difficult insurance claim concerning also a bigger amount incurs, there is also bigger possibility that the settlement requires longer and more intense legal procedure supported by legal experts, since establishing the liability and defining the amount is indeed a complex question in many cases (especially in case of damages causing personal injuries and spill-over effect). Liability insurances are called classic long-tail modes by the literature which means the division of damage in such a way that lots of small damages occur on the one hand, but there are some significant damages on the other hand, therefore the division's tail is very long. In case of the liability insurances, the percentage of the not yet reported damages is also bigger than that of the damages incurred, since there might be a longer time-gap between causing the damage and reporting on it (e.g. when a trigger event occurs due to medical malpractice or legal error, but it has only been revealed later). In these cases a higher IBNR-reserve might be required. (Pandurics and Markó, 2015)

The typology of the classic commercial liability insurances and professional liability insurance offered on the market is presented in Table 2.

**Table 2: Types of commercial liability insurances**

Commercial general liability (CGL)
Excess liability, umbrella
Environmental impairment liability
Product liability, Product recall and product integrity
Workers compensation and employers' liability, employment practices liability
Directors and Officers insurance (D&O)
Professional liability or errors and omission (such as medical malpractice or cover for accounting firms, lawyers, architects, etc.)

Source: based on Swiss Re (2009) p.7-8 and Swiss Re (2014) p.32.

The commercial general liability (CGL) used by companies to cover their general liability loss exposures. In the framework of a general liability insurance contract the insurance company covers those damages of persons and outside of the contract those property damages for which the entrepreneur or the company is liable in compliance with their compensation responsibilities laid down in the contract (Illés and Márki, 2000). Damage caused outside of the contract means that while undertaking the insured or related activity the insured entrepreneur or company cause damage regarding the activity defined in the insurance contract for a person with whom they are not in contractual relationship, or who is not user of the service provided by the insured entrepreneur or company.

This liability policy covers bodily injury, property damage, personal and advertising injury and medical payments. The insurance company agree to pay on behalf of the insured except the damage is expected or intended. Among other things ,contractual liability, liquor liability, workes compensations, employers liability, environment pollution and aircraft are also in the exclusion list. As catastrophic loss exposures are not covered by commercial general liability, an excess or umbrella liability can help and provide protection to the business firms.

The excess liability insurance is the insurance coverage completing the compensation limit of the basic insurance, meanwhile the umbrella insurance is the insurance coverage completing the basic insurance which may concern both the limit and the risk. The environmental impairment liability insurance is a less known type of insurances even though environmental protection issues have reached central point on the agendas recently. In Hungary, concluding such an insurance by the person producing bigger quantity of waste, its recipient, the supplier, the storage and the handling companies, is prescribed by law.

In addition, it is worth considering this construction in all cases when a group endanger its environment as restoration of damages might cost a fortune. In addition, there are product or service provider liability insurances as well on the market, which cover non-professional insurance claims caused in the framework of the contractual relationship. For the employees, it is of utmost importance to have an employers' liability insurance which provides financial support when the employee (or anyone to whom the employer causes damage with personal injury) suffers work accident and claims compensation in relation to this from the employer.

Directors and Officers liability insurance (D&O) protect managers from claims which may arise from their own activities and own decisions. These activities and decisions are out of the company's contractual relationship and not in connection with the company's operations and goals. Professional liability insurance offers liability covers for special professional risks. This types of insurance provides protection to professionals such as lawyers, brokers, accountants, physicians, pharmacologists ect., whos cause damage to a third person under performing their professional services. These third persons are in contractual relationship with the professionals (Rejda and McNamara, 2014).

### Analysis of the Hungarian business liability market

The presentation of the assessment of changes and tendencies occurred on the liability insurance market and the presentation of the role and significance of the corporate liability insurances were amongst our research goals. While concluding our analyses, we reviewed the current literature regarding the topic, assessed the aggregated market data provided by the MABISZ and interviewed the main actors of the liability insurance market.

The Hungarian liability insurance market is underdeveloped; the insurance penetration is significantly lower than the world average. As it is shown on Table 3., the largest market is by far the liability market of the United States, where 0,5% of the total GDP was spent on liability insurance in 2013. In Hungary, the same ratio was only 0,06%, which shows that the Hungarian companies have not yet realized the importance and significance of liability insurance as a risk management technique. As recent (2010) tragic event in Hungary has proven, some already paid a high price for that (the largest industrial disaster: waste reservoir collapsed at MAL Co. (covered up to 10 million HUF limit with liability insurance) released hazardous red sludge killing 10 people and causing at least 39 billion HUF in overall damages (hvg.hu).

*Table 3: Liability insurance penetration in international comparison*

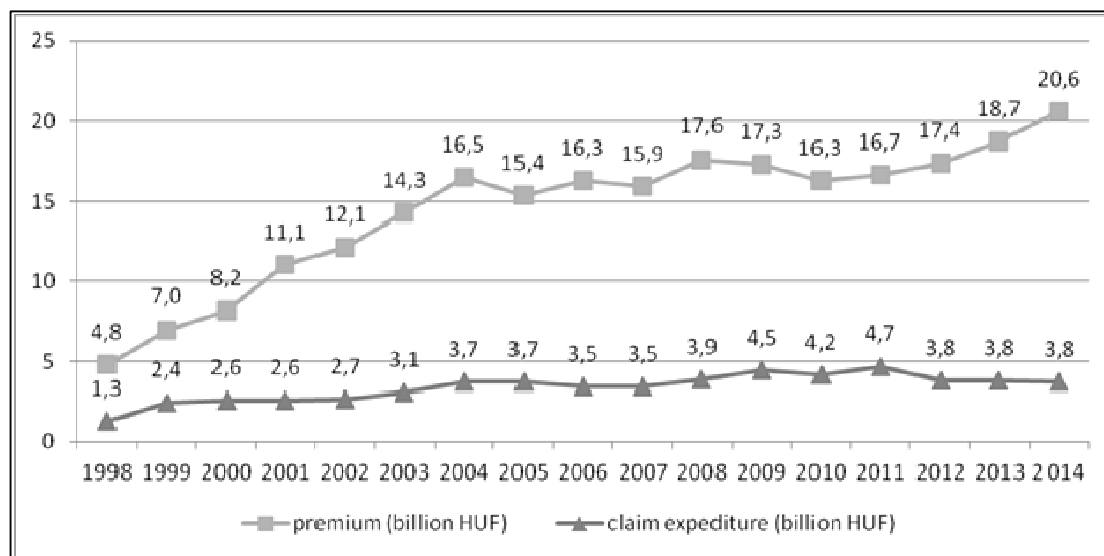
Rank		Premiums & GDP (USD billions) - 2013			Percentage share	
		Liability	Total Non-Life	GDP	Liability/Total Non-Life	Liability/GDP
1	<b>US</b>	84	531,2	16802	15,8%	<b>0,50%</b>
2	<b>UK</b>	9,9	99,2	2521	10,0%	0,39%
3	<b>Germany</b>	7,8	90,4	3713	8,6%	0,21%
4	<b>France</b>	6,8	83,1	2750	8,2%	0,25%
5	<b>Japan</b>	6	81	4964	7,4%	0,12%
6	<b>Canada</b>	5,2	50,5	1823	10,3%	0,29%
7	<b>Italy</b>	5	47,6	2073	10,5%	0,24%
8	<b>Australia</b>	4,8	32,7	1506	14,7%	0,32%
9	<b>China</b>	3,5	105,5	9345	3,3%	0,04%
10	<b>Spain</b>	2,2	31	1361	7,1%	0,16%
	<b>TOP10</b>	<b>135</b>	<b>1150</b>	<b>46900</b>	<b>11,7%</b>	<b>0,29%</b>
	<b>World</b>	160	1550	61700	10,3%	0,26%
	<b>Hungary</b>	0,067	1,3042	105	5,1%	<b>0,06%</b>

Source: Swiss Re (2014), p5.

The Hungarian insurance market has been steadily growing from a very low base level (see Figure 1.). In 2014 the total liability insurance market amounted up to ca. 20 billion HUF gross written premium. The claim ratio has only been 23% on average in

the last 10 years (2005-2014), signaling a market segment with above average profitability compared to the total non-life insurance market profitability.

**Figure 1: Development of the Hungarian liability insurance market 1998-2014**



Source: MNB (2015)

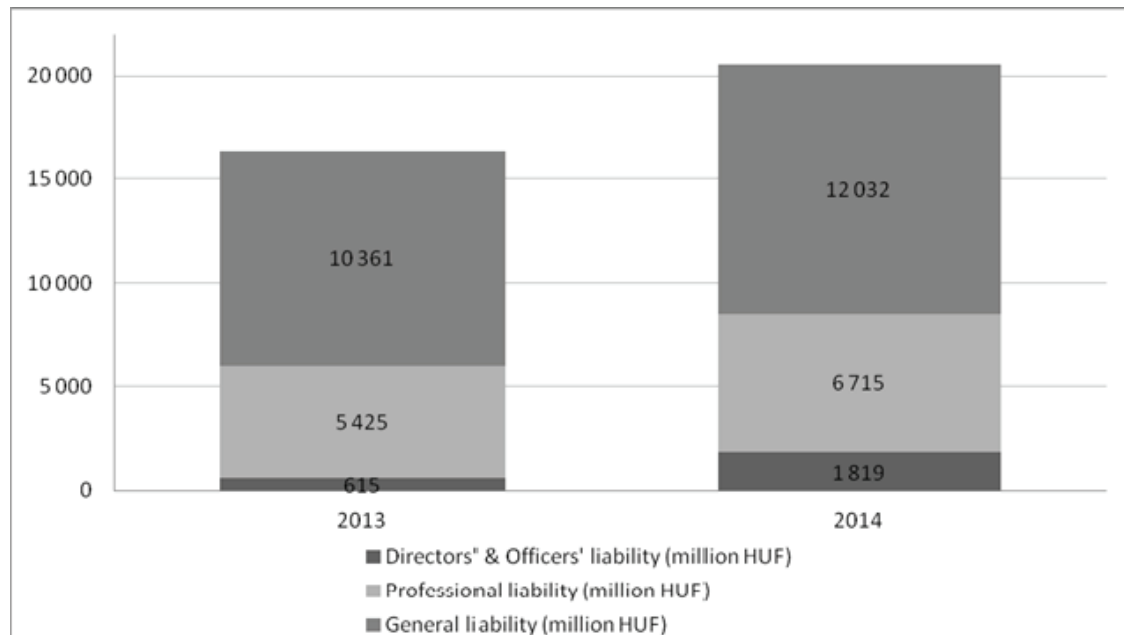
In 2014, the small segment (8,8% of the liability insurance market) of Directors & Officers Liability Insurance (D&O) has received more attention and focus due to significant changes in the Hungarian Civil Code, according to which from March 15, 2014, companies and the management of companies are universally liable for damages caused by the company. As a result, D&O insurance grew significantly: closing portfolio was 615 million HUF in 2013 vs. 1.819 million HUF in 2014. The number of contracts is still very low (only 3811). Despite of the low number of contracts (3,7% of the liability insurance market), the increasing of premium of D&O insurances (1204 million) on the whole liability insurance market means almost 30% of the 4 billion increase which took place in the past year. Figure 2. shows the total premium and ratio of the three main types of the liability insurance in 2013 and 2014.

The growth of the total premium can be explained partly by the increasing number of contracts (professional and D&O) and partly by the increasing of general premiums. The degree of being exempted from responsibility during professional damages decreases which shows to the direction of the objective responsibility.

Regulations make compulsory to conclude liability insurance in case of an increasing number of professions which draw the market's attention to the liability insurances. Besides, the insurance amounts of HUF 5-10 million laid down in the contracts concluded by the domestic companies deemed to be rather low. This is partly due to the bounding nature of insurances, as companies cannot see the real significance of the insurance, their primary goal is to conclude the contract on the lowest price possible. The management of most of the companies is not able to seize correctly the risks and

their degree which the company has to face which also leads to the consequence that the chosen liability insurance does not cover the possible risks.

**Figure 2: Premium of the Hungarian liability insurance market**



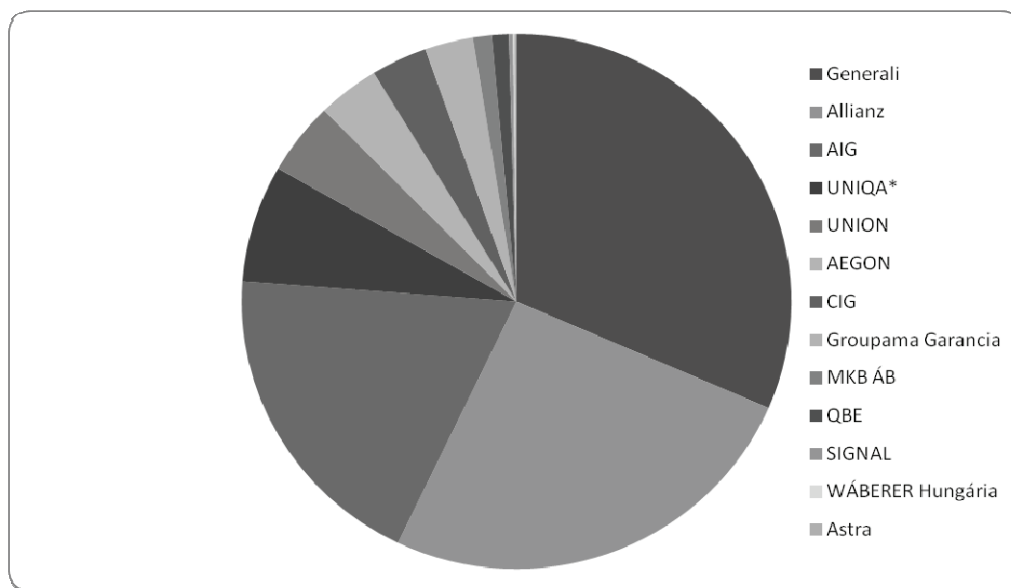
Source: MABISZ (2015)

Besides the compulsory liability insurance contracts, there are more professional areas where the compulsory liability insurance limit is still missing (that is there is no minimum insurance amount). Consequently, a contract concluded with a minimal limit may be satisfactory to be in compliance with the liabilities laid down in the law for the representatives of several areas, such as the veterinarians (Act CXXVII. of 2012), health service providers, leaders of medical researches (Act CLIV. of 1997), hunters (Act LV. of 1996) or operators of a firing range (MoI Regulation No.49/2004. VIII.31.).

However the minimum insurance amounts defined by the law raise also problems, lawyers are obliged to pay HUF 8 million per insurance claim and 16 million per year as a total limit which cannot be deemed realistic in comparison with the extent of the possible risk (Bylaw of the Hungarian Bar Association No.7/2011. X.24).

The Hungarian liability insurance market may be considered strongly concentrated that can be seen in Figure 3. The summary has been prepared based on the data of the year 2014 which contains not only the general liability insurance but the professional and the D&O insurances as well.

**Figure 3: Trends in the Hungarian liability insurance market**



Source: MABISZ 2014. IV. quarter

Generali has the biggest share of the market (31,51%) and the two biggest insurance company covers 57,1% of the market. AIG also has a significant share (19,1%), which means 76,2% share altogether for the three biggest company. Amongst the 13 companies, there are only 6 which offers D&O insurance, while 11 companies offers professional insurance and general liability insurance is available at all the 13 companies. Since the D&O insurances were given more attention only in 2014, in the future it is expected to be included of the portfolios of other companies as well.

One can see similar strong concentration if only the professional liability insurance market is examined, where the market share of the three biggest company (Allianz, Generali, Chartis) is 71,6% regarding the data of 2010 based on the study of Kovács and Nagy (2011). They defined the relatively low manpower of the professional risk pool as the reason of the high market concentration.

## Conclusions

Although in the past year the modification of the legal background contributed to the increasing role of the liability insurance, the domestic enterprises are still not fully aware of their significance. One of the biggest problems of the domestic market is the extremely low penetration. Having an insurance is not sufficient in itself if it does not cover the real risks or does not provide the appropriate cover on the given risk.

This is also the case at the professional liability insurances – prescribed by law - where there is no obligatory limit defined. In these cases, the coverage is not convenient if the representative of the given profession concludes the insurance only due to its



obligatory nature and not because he feels threatened indeed. This also means that the limit defined freely is much lower than the real risk.

Professional organizations have to reach (push) the increase of limits prescribed by law to a rational level and in certain cases specifying the obligatory limits. Otherwise, the concluded liability insurance does not meet with its original function, that is it does not protect the insured from real risks.

To decrease the lack of information on corporate side, experts should also be involved. Regarding real risks seized by these experts, the insurances concluded on appropriate limits (even HUF 50-100 million) may provide real cover for the companies.

Liability insurance penetration will certainly show an increase in the future, since we expect the continuous spreading of configurations of objective liability also in Hungary. Supported also by more rigorous legal background, the number of possibilities of exemption from reimbursement of damages caused during professional activities decrease.

By growth of the number of corporate liability insurances, the risk group also increases, which may lead to the reduction of the insurance fees by the insurance companies. This may eventually increase the willingness for insurances.

By communicating the significance of the liability insurance, by the economic up-turn and by the change of the legal background, the level of insurance is expected to increase in the future. Market actors become more conscious and they turn their attention to the insurance companies, so that the demand of insurance increases on corporate side.

The development of the corporate liability insurance market in Hungary and the higher level of the insurance culture therefore necessitates the realization of harmonized and complex tasks. Beside the regulatory side these tasks appear on the market and customer side as well. The progress experienced on the market so far, the regulatory changes and the demand of a more conscious operation by the entrepreneurs indicate altogether a positive prospect.

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*Zoltán HORVÁTH*

### 3.5.NATURE OF NONPROFIT ORGANIZATIONS' MANAGEMENT

#### **Summary**

Since the early 1990s non-profit organizations have emerged and have been growing in many sectors. As a result a variety of civil society has been formed. This process has continued ever since: non-profit organizations are essential elements of current societies. These organizations are characterized by greater vulnerability to the prevailing environmental factors. More and more of these organizations use typical profit-oriented enterprise management methods to succeed. Based on accounting indexes and personal observations, this study shows the most important characteristics of these organization's management, factoring the organizations by their forms. The survey includes information from the annual accounts of 100 foundations and 100 associations completed by in-depth interviews and the author's personal experiences.

**Keywords:** non-profit, management, strategy, planning, environmental analysis

#### **Introduction**

There are several areas in a society where formal, for-profit organizations are less effective reaching their objectives (e.g. sport, traditions, public safety, and culture). In these cases Non Governmental Organizations (NGO) can be solutions. They perform tasks what for-profit companies do not assume, and often satisfy higher needs, which promotes the establishment and operation of these projects. Depending on the development and structure of a particular society, the local community's demands, opportunities and traditions, there are plenty of tasks, that are resolved by NGOs, since the state and local government agencies and economic actors do not want to, or are not able to perform them. Important role of the NGOs that they could be a sort of indicators by their flexibility and quick adaptation, indicating if something is not well regulated or conflict of interests take place. The financial management of non-profit organizations exhibits many traits similar to those of for-profit companies, but at least this much different characteristics appear. The effectiveness of civil society organizations is largely determined by the market environment, they get their sources similar as businesses. They have resources of which effective utilization and development greatly affects the success of managing their basic tasks. Of course, the fundamental goal is not to maximize profit but to perform the tasks taken as perfectly as possible. To do so, they provide resources mainly not from selling their products and services, but in the form of aids and donations. Non-profit organization's identity, strategy, human factors, mode of operation and organizational management solutions are different. (Bullain, 1995)

Some non governmental organizations do not have a written organizational frame, however plenty of formal organization have been established as yet. Due to the importance of the NGOs' large number, there is a growing demand for processing their management and an organizational feature, like it is with the economic organizations. As long as more people work on a given task, regardless of the organizational framework, almost self-evident that management issues raise. There are organizations which ignore these issues, nevertheless it definitely helps to achieve the goals, if the leaders possess management skills and use the essentials of organizing, leadership, management, monitoring and planning.

The majority of non-profit organizations evolve through self-organization, the organizational structure is informal, the powers and responsibilities are not exactly clarified, and therefore the leading and monitoring is more difficult as well. Another problem is that the leaders and members do not work full time, and do not get salary, so their tasks may be carried out incidentally, even the function of the whole organization may be wavering.

For certain times, NGOs can even suspend their activities. For non-profit organizations, using the management and organizational theories and processes in the same way as it was proven good at for-profit companies is not necessarily rewarding, but their knowledge and conscious adaptation is a must. For the registered organizations the legislation, the application, credit system also requires the use of management techniques.

The basic objective of the study is, to draw attention to the particularities of the NGO management, and to track down the conditions for the more effective operation. The NGO literature is very wide, but they are largely sociological aspects and do not examine the management area. (Farkas, 1994) The study included 200 NGOs, half of them operate as associations, the other half as foundation. Because of the large number of organizations, and to improve the comparability, I have introduced some restrictions. Only organizations were included in the sample, which had at least 2 million HUF income for two years (2012-2013), and perform duties related to education in whole or in part. Territorial restrictions are not applied.

The annual reports are collected from the list of non-governmental organizations on the website [birosag.hu](http://birosag.hu), and based on this data; I have contacted 2-2 association and foundation leaders personally. All this is complemented by personal experience, as I am leading an association for 15 years, and I am a member of the Board of Trustees of two foundations. My basic aim is to form findings and conclusions, which can help the operation and management of the NGOs be more effective. The survey data is not necessarily characterize the whole sector, because the sample is not representative, however the size of the sample gives opportunity to make significant and real conclusions.

### **The role, importance and economic weight of non-profit organizations**

After the regime change, the domestic society used the possibility of self-organization, and non-governmental organizations were set up widely and in large numbers. It also

can be said, that based on the number of organizations, much more social activity could be assumed, despite the fact that many initiatives will only work informally. Many registered organizations show only minimal activity, revenues are minimal, their activities are periodical, and sometimes it may be suspended. All of this is related to the lack of resources, the eventualities of tasks and other activities of the leader.

The formalization of the organizations is on low-level, applying management methods are incomplete. Their activities often bring conflicts if they are confronted with certain economic interests, or power status quo. Their role, however, is huge, as they carry out specific tasks and in addition characterize the state of society as a whole as well. Civil society organizations accurately indicate the existing trust, willingness to cooperate and activity of a given society, play an intermediary role between citizens and public authorities, market and government sector. (Putnam, 2000; Bíró, 2002)

They take over welfare tasks from state and local government agencies in order to provide them more effectively. This trend is growing in Hungary. The condition of charitable status, is to pinpoint the welfare tasks that had been provided by the state. However, the government must continue taking part in financing these tasks.

Operation and management of civil society organizations largely determined by the new regulations came into effect from 2012 (CLXXV. Act 2011, CLXXXI. Act 2011, 350/2011. Government regulation). Among the regulations of the management, the most important ones are that the annual budget should be prepared, the annual report must be deposited in the National Judicial Office, the public must be kept informed, the public benefit is being overridden, and the laws for-profit businesses termination also applies to NGOs.

According to the CSO in 2013, there were 64,542 registered non-profit organizations, however, the courts registered 20 thousand more, the Civil Information Portal currently has data of 118,462 organizations. Thus, the CSO is not complete, but I use it because it provides sufficient information for the analysis.

In 2013, seven hundred less non-profit non-governmental organization were working in Hungary than in the previous year, 22.5 thousand in the form of foundation and 42 thousand as non-profit social organization. 62% of the foundations are related to three areas of activity, education (32%), social services (16%) and culture (14%). In the corporate profit organizations, the proportion of the recreation (25%) sport clubs (16%) and cultural associations (13%) were the highest. Organizations with public beneficial status have the ratio of 55%. 91% of the organizations conducted a full cash flow in the given year, while 4% of the organizations did not engage any financial activities.

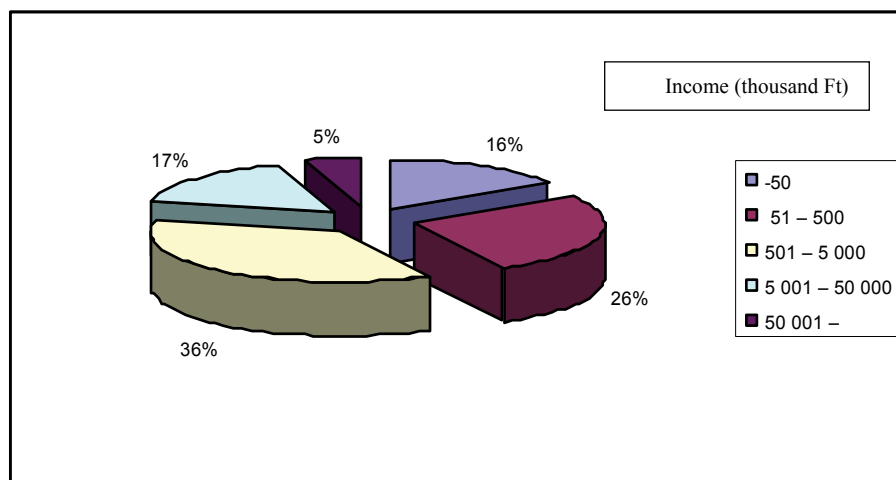
In 2013, revenue amounted to HUF 1,241,595 million, 3% reduction in real terms compared to 2012. 35% of these revenues came from state and municipal budgets, which meant a 5 percent drop compared to the previous year. At the same time the proportion of the own revenues increased from 40% to 44%.

**Table 1: The number of non-profit organizations, according to their operating characteristics (2013)**

<b>Organizational form</b>	<b>The number of non-profit organizations, according to their operating characteristics</b>				
	<i>Have revenues, expenditures</i>	<i>no expenditures</i>	<i>Have only expenditures</i>	<i>Operating without money</i>	<i>Total</i>
Foundation	19 332	273	912	657	21 174
Public Foundation	1 253	13	47	13	1 326
Association	31 908	745	737	2 006	35 396
Public body	260	1	0	1	262
Union	854	17	5	46	922
Professional employer organization	2 151	32	63	136	2 382
Non-profit business association	2 787	3	144	69	3 003
Merger	69	0	4	4	77
<b>Total</b>	<b>58614</b>	<b>1084</b>	<b>1912</b>	<b>2932</b>	<b>64542</b>

<b>Organizational form</b>	<b>Total income for the non-profit sector</b>		
	<i>HUF million</i>	<i>Distribution, %</i>	<i>Revenue per organization, HUF thousand</i>
Foundation	224 969,60	18,1	10 624
Public Foundation	27 409,70	2,2	20 670
Association	300 225,80	24,2	8 481
Public body	54 467,40	4,4	207 890
Union	11 996,00	1	13 010
Professional employer organization	63 438,70	5,1	26 632
Non-profit business association	554 086,50	44,6	184 510
Merger	5 001,30	0,4	64 952
<b>Total</b>	<b>1241595</b>	<b>100</b>	<b>19237</b>

Source: CSO

**Figure 1: Ratio of non-profit organizations according to sales volume (2013)**

Source: CSO

Between 2012 and 2013, the number of employees in the non-profit sector decreased by 10%, the total number in 2013 exceeded 130 thousand. This value made up more than 3% of the employments in the national economy. Within this, the number of full-time workers was 83.5 thousand, 46.9 thousand workers beside them worked in part-time. In 2013 the estimated number of volunteers in the sector was 490 thousand. They have passed 51 million working hours, which is more than the working hours of 24.5 thousand full-time employees. The estimated value of their work is HUF 55 billion. The average of the employment and the income can be considered as the weight of the sector in the national economy, which exceeded 4% between 2010 and 2012, but fell slightly in 2013.

### Some features of the management of non-profit organizations

#### *Income*

The average income of the investigated organizations was HUF 15929 thousand in 2013, which is almost a 12% decrease over the previous year. The average revenue of the foundations almost three times more than the associations' (HUF 21048 thousand – HUF 7311 thousand).

**Table 2: The number of analysed organizations by size of income**

	Foundation (pcs)	Association (pcs)
2-4 million	38	51
4-8 million	14	29
8-12 million	15	17
12-20 million	24	2
20 million and more	9	1
<b>Total</b>	<b>100</b>	<b>100</b>

Source: own survey

Only two association had income from Entrepreneurial activity, but the core business income is very lower than other revenues (support, membership fees, donations). 46% of the foundations gained revenues from core activities, its average values is HUF 3259 thousand, 39% of the associations had of such income with an average of HUF 3millions. Both for foundations and for associations the income from financial operations is negligible. 94% of the foundations had income from support, the average value of these is HUF 22567 thousand. Support from the central budget could be found at 62% of the foundations, average value HUF 27168 thousand, 51% of these organizations received local governmental funding with an average value of HUF 1410 thousand. The shortfall is quite serious in obtaining EU funds, since only 5% of the foundations had such an income with a total revenue of HUF 32 millions. Almost every foundation use the option of the 1% personal tax income offerings, since 96% percentage of them indicated such benefits, However, their average value is not so significant ( HUF 191,000). 95% of the associations had revenue from grants with an average value HUF 4,076 thousand. 48 associations had an average income of HUF 4,850 thousand from central budget, and 58 organizations received grants from local government with an average value of 3,478 thousand forints. Only 2 associations had EU support, while 86 organizations received 1% of the personal income tax offerings with an average value of HUF 183 thousand.

### *Expenditures*

As regards expenses, the largest amount accounted is among the other expenses, every organization had material expenses. Personnel expenses are accounted by 66% of foundations and 76% of associations with the value of almost 4 million and 2 million forints per organization. It suggests up-to 2 and 1 full-time employee, but in most cases, there is absolutely no full-time employee. Personnel expenses made up of simplified employment and agency contracts. The role of volunteers is particularly important in this sector, so one of the most important tasks for management is the activation of human resources.

**Table 3: Expenditures of the examined organizations**

	<b>Foundation</b>		<b>Association</b>	
	Quantity (pcs)	Average value (thousand Ft)	Quantity (pcs)	Average value (thousand Ft)
<b>Material Expenses</b>	100	4629	100	3040
<b>Personnel Expenses</b>	66	4117	76	1904
<b>Depreciation</b>	59	1592	32	724
<b>Other Expenses</b>	72	24271	88	3158
<b>Expenses of Financial Operation</b>	14	198	4	22
<b>Total Expenses</b>	100	22717	100	7136

Source: own survey



More than half of the organizations had a negative result for the year. In this respect, the associations' situation was better, they had an average value of HUF 128 thousand, and 32% of organizations had negative results. For Foundations 48% had a negative result for the year, as a result of this, the average loss is greater than one and a half million forints. This is also dangerous, because the condition of charitable status is the positive result for the year. 46% of the foundations and 34% of the associations were public beneficial.

### ***Balance sheet data***

The examined organizations' key balance sheet data are shown in Table 4. Foundations have a much higher proportion of fixed assets; however it is almost exclusively tangible assets. The associations have much less assets, their tangible assets is less than a quarter of the foundations'. The organizations have almost no long-term obligation, do not participate in lending.

***Table 4: Balance sheet data of the examined organizations***

	<b>Foundation</b>		<b>Association</b>	
	Quantity (pcs)	Average value (thousand Ft)	Quantity (pcs)	Average value (thousand Ft)
<b>Fixed Assets</b>	<b>78</b>	<b>32134</b>	<b>32</b>	<b>7 913</b>
Intangible Assets	2	289	0	0
Tangible Assets	77	34984	32	7 913
Fixed Financial Assets	2	1530		0
<b>Current Assets</b>	<b>100</b>	<b>5079</b>	<b>100</b>	<b>1 343</b>
Stocks	9	979	4	323
Receivables	12	4357	0	0
Marketable Securities	3	4070	0	0
Cash	100	3641	100	1 343
<b>Assets</b>	<b>100</b>	<b>26004</b>	<b>100</b>	<b>2 928</b>
<b>Equity</b>	<b>100</b>	<b>2564</b>	<b>100</b>	<b>893</b>
Share Capital	96	256	18	15
Retained Earnings	98	3660	75	622
Long-term Liability	6	4425	0	0
Short-term Liability	65	3467	14	973
<b>Liabilities</b>	<b>100</b>	<b>26004</b>	<b>100</b>	<b>2 928</b>

Source: own survey

### ***Corporate plans***

It showed to be typical for the interviewed organizations to prepare written plans, but only 33 organization had long term (3-5 years) strategic plans. Most of them (168) are making annual program plan, and nearly the same number (172) also have an annual budget. Making a project plan was also common, which applies to a particular program, but these programs usually occur within the given year. 74 organization had business plans with more in-depth analyzes, 57 had monthly operational plans and 29 had investment calculation.

Strategic plans are primarily designed for the local government and to a smaller extent for the management and the members. Among the answers appeared in much less proportion that the strategic plans are made for the public, sponsors, investors, customers and banks. It would be fortunate if strategic planning were more frequent, and it would be created not by external pressure, but for the efficient operation of the organization. This long time plan can form the basis for other corporate projects, such as annual plan, project plan, operational plan or investment calculation.

There were many organizations, who did not have a strategic plan, the most common reason for this is that there is no time or expert to do that. Many people do not see the point in it, because it is hard and difficult to plan forward a year, and unnecessary for several years, and they don't need to plan but need to adapt. The need of adaptation can be maximally understood, but most of the organizations deprive themselves of the possibility of further development in the absence of strategy, and this is often associated with defeatism and narrow-mindedness. It was a common response that the management has the strategy in mind, but they do not put it down in writing. Indeed, many people think so, but often they are just trying to cover their deficiency, and avoiding the analytical work. There can be several problems with strategy existing only in mind. First, not measurable and verifiable, does not contain detailed analyzes, and perhaps the biggest problem is that it is prepared by only one man. In the case of non-profit organizations even more true that the process of strategic planning is more important than the written plan itself. Many leaders are not even aware of the opportunities and dangers of the environment, and what are the strengths and weaknesses of their organization. Involving the members into the planning process is essential. The success of this strategy often depends on a good idea or insight, and it can come from those who are doing the actual work. It is the leader's interest and duty to listen to the members' opinion on future goals, opportunities and threats.

### ***Application of analytical methods***

I examined on the basis of Attila Chikan and his associates (2004), what analytical methods are used by non-profit organizations during their activities. According to the experienced results, using the analytical methods is less common than at the for-profit companies. Even those organizations are not using these methods deliberately and repeatedly, which are preparing strategic or business plans. The most common application is the SWOT analysis, and many of them consider the phase of analysis done with it. A better established and more successful plan could be carried out, if

SWOT did not appear as self-analysis, but it would sum up detailed macro-and micro-environmental forecasts, and the main results of corporate diagnostics, and thus become the basis for generating strategic actions. For non-profit organizations it is relatively more frequent, to examine the functioning of the organization (resource and value chain analysis), but they do not pay enough attention to the environmental projections.

#### ***Environmental analysis***

Organizations do not operate in a shell, but as part of larger, comprehensive systems, connected to a defined section, operate within given social and legal conditions, and are influenced by the macroeconomic conditions. The main problem is the uncertainty and complexity of the environmental changes. Since non-profit organizations obtain their resources mainly from allowance, their exposure to the macro-environment is greater, than in case of for-profit organizations. The social environment strongly affect the organizations' goals, results. These organizations detect the arising problems quicker, and have more direct responses to the solutions, to meet the varying needs. Although, most of the organizations do not make PEST or STEEP analysis, they are aware of the significance of the macro-environmental factors, but many of the organizations stop at recording the data of past and present, and do not perform forecasts. Another major mistake is, both at business plan, and at strategic plan, that they are working with the most easily accessible macro-environmental data, rather than seeking out the truly relevant information. The organizations do not have impact on the macro-environmental factors, but the level of exposure can be reduced by logical conclusions, and in some cases proactive attitude can be achieved instead of adaptation. Proactivity primarily can mean a strong advantage in competition, but can be beneficial for non-profit organizations as well, as long as they maintain the flexibility and adaptability of the organization.

By profit-oriented enterprises the most commonly used industry analysis is the Porter's five-factor model. This can be useful for non-profit organizations as well; however, because of the nature of the activity, stakeholder analysis can provide more, important information. The expression „stakeholder” is known by almost all of the respondents, however its exact meaning was not clear for everyone. Stakeholders have interest in the operation of the organization, and thus have a certain level of influence power, affect the life of the organization through positive or negative intentions. The background and the motivation of the influence have to be studied first, how the organization can rely on, work with the stakeholders, and how necessary it is for the organization to consider and to avoid their criticism and repugnance.

#### ***Corporate culture***

For non-profit organizations it is beneficial to pay special attention to corporate culture, which is often forgotten, because there is not enough time and money for its development, and its positive effect can only be felt on the long run and indirectly. According to the survey, the corporate culture of the NGOs can be best characterized

by group and human orientation, stability and caring about the details. Innovation and the spirit of competition are felt to be the least important, which can be a big mistake, because to increase the efficiency, to perform higher-level tasks these two factors are much needed as well.

### ***Portfolio analysis***

Portfolio analysis is a widespread analytical method among for-profit companies. The best known type is the BCG matrix, but GE-McKinsey matrix, life-cycle portfolio and even the technology portfolio are often used as well. From the NGOs point of view, it is important, that it helps the appropriate allocation of the resources, setting priorities, and propose the development of certain areas of activity. Branches of a specific company are usually studied in two dimension during the analysis. Useful dimensions for for-profit companies (e.g., industrial growth / market share), are less useful for NGOs, so it is rewarding to convert them according to their nature of operation. Based on Lawry (2001), the two dimensions of portfolio analysis of the NGOs can be the following:

1. How they contribute to the fundamental objectives of the organization?
2. How much financial and human input they work with?

Based on these, the following programs can be in the range of BCG matrix:

*Stars*: strong services, programs, contribute significantly to the mission, dynamic, popular, creative, require continuous development.

*Question mark*: Recent programs, they have the potential to become stars, still a lot of investment required.

*Cash cow*: reliable, routines, useful, their operation is risk-free

*Dogs*: They are operating with slight results, but with a lot of financial and human inputs.

According to the survey, organizations primarily are seeking safety, because 82% of them had programs in the „cash cow” category, while only 24% rated one of their programs to the innovation requiring „question marks” category. 67% of the organizations rated programs, services in to the range of „Stars”, while 45% to the „Dogs”.

### ***SWOT Analysis***

The most important possibilities and dangers can be easily identified, if the organization went through a detailed environmental analysis. These are the factors that cannot be, or cannot be greatly influenced by the organizations. To define the strengths and weaknesses – which the organization can alter independently – corporate diagnostics help. After the above steps, a mature, specific, based on reasoned information SWOT matrix can be made. In many cases the exploratory analyzes are left out, and the elements of several range of the SWOT are based on the leader’s personal insights. However, this will be complete by no means: key information left out, containing very subjective statements.

The SWOT table always includes factors specific to the organization. Universal elements should not be listed, but still I consider interesting to present which are the most common strengths and weaknesses, based on the organizations' responds. (See Table 5)

*Table 5: The most common strengths and weaknesses of organizations*

STRENGTHS	WEAKNESSES
Good opinion of the partners Good management Outstanding expertise Good financial resources Wide range of professional contacts Using economic size Possess competitive advantages High technical standards Market dominance Advanced technology	Poor infrastructure Lack of capital No strategy Underdeveloped organizational structure Lack of technical skills Lack of management skills Outdated technology Rivalry between the managers Bad image

Source: own edit

## Conclusions

Non-profit organizations are only able to perform effectively their self-imposed tasks taken over from the state, if they are successfully managed, which is also extorted by the legislation. This requires choosing the right organizational framework which will ultimately be determined by type and extent of the commitments taken. This will also define the time, energy and human resources available for each task. In general one can identify obtaining the required funds as one of the most important tasks of the leader. In addition they need to organize everyday activities and to meet state regulations and especially important their continuous social networking. The importance of social networking is further increased by the available company tax-based subsidy for the sport and cultural organizations. Economic indicators also confirm that these organizations exist under difficult financial circumstances, depending mostly on subsidies, which means great risks and exposure. In Europe the significance of the non-governmental organizations has been recognized, making resources available for them, but Hungarian NGOs do not use these sources. This can mostly be explained by the lack of knowledge and experience. Typically the public benefit organizations' incomes are higher because numerous tenders can only be submitted by them. Another relevant experience is that executive officers do not pay enough attention to the paper-work of the management, resulting insufficient obligatory records and data. Strategic approach and creating written plans can not be considered general in the civil sphere, however more and more organizations recognize its significance. There are organizations that act to set an example and show in practice how much the organization can develop as a result of a well-thought-out strategic and business plan. In the rapidly changing environment, the course of design will provoke thinking-together, and allows faster adaption, while significant learning process takes place through a better understanding of the environment. Thereby the risks and

exposure of the organization are greatly reduced. It harmonizes the individual motivations, directs all efforts in one direction, and provides direction for the short-term decisions. By letting the members know the distant goals of the organization, planning reduces the uncertainty, potential conflicts, and plays a role in encouraging contributors.

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### 3.6. USE OF SOCIAL MEDIA MARKETING TOOLS FOR PROMOTING HEALTH

#### Summary

The increasing number of people using social media determines the contemporary approach to the means of communication to the information society. The Marshal Offices willing to conduct effective health promotion campaigns are forced to adapt to the changing trends in the modern marketing communication.

Objective: The aim of this study is to determine whether the Polish Marshal Offices use the tools of social media marketing activities in the field of health promotion.

Material and methods: 14 Marshal Offices in Poland were investigated. Two methods of research were used: CAWI and CATI based on author questionnaire. Data analysis was based on standard statistical methods.

Results: 93% of responding offices are involved in activities related to the promotion of health. The main domains are: cancer (30%) and stimulants (28%). In the opinion of employees of the Marshal Offices the most convincing form of communication with patients is direct promotion (46%). Far less important are information posters (12%) or TV spots (10%). 56% of offices do not use social networking sites in the conduct of health campaigns. The other commonly used canals in these operations are Facebook (25%) or YouTube (6%). 50% of offices do not apply the tools of social media marketing. The rest declares active participation in discussions on Internet health forums.

Conclusions: It has been postulated to pay more attention to social media and social media marketing tools in health promotion campaigns carried out in order to improve the efficiency of communication with the present information society.

**Keywords:** marketing communication, social media, social media marketing, health promotion, Poland

#### Introduction

Nowadays, due to the latest technology, it is observed a dynamic development of communication based on the medium of the Internet. The network has not only become a popular medium, but also an effective, efficient and accessible communication channel. The Internet allows two-way communication in which the recipient and the sender can take their roles. In addition, the network makes it possible to use it for a lot of people at the same time (ed. Pabian, 2008). It is observed in this medium fast and uninhibited transfer of necessary and important content from the

point of view of its users. The ties between Internet users are formed around the concerns of their subjects, content, products, services or issues including health (Syrkiewicz-Świtała – Świtała, 2012). The individuals associated in the net make relationship building social media. The persons co-create content and exchange opinions in a fast and dynamic way. Efficient flow of information in social media is also facilitated by the development of mobile digital devices which undoubtedly supports the rapid dissemination of specific information. Virtual and mobile technologies also allow a significant reduction in communication costs (Pabian, 2008). The increased interest in social media in the society has allowed for the creation of a new Internet marketing tools (Dryl, 2011). In particular it is important to pay attention to the tools of social media marketing, which essence may be described as "a set of relationships, behaviours, feelings, empiricism and the interaction between consumers, brands, where is the multidirectional communication exchange of experience with advanced communication tools (Trzeciak, 2009)". Currently the importance of social media takes on more and more comprehensive. They serve not only to build social relationships, but they have become the basis for the search for information on specific products or services. In social media the marketing activities are carried out to strengthen the business messages (Dorenda-Zaborowicz, 2012). Contents apply to both developed specific products, services, but also ideas, aimed at creating new social attitudes and beliefs (Andreasen, 2002). It may be a field for work in health promotion and education. Through the concept of health promotion is understood "the process of enabling every human being to increase the impact on their health in terms of the improvement and maintenance" (Karski, 1992). As a result, it is understood as the creation of the conditions necessary to be informed to improve the health of the population. It is to ensure adequate access to necessary health-promoting behaviour that promotes knowledge and support social responsibility for health. It also seeks to put pressure and increase the impact on health in local and regional communities i.e. in the state institutions (Czupryna et al., 2001). Via the Internet and in the social media, using the tools of social media marketing, message senders can monitor the behaviour of recipients and track and create their opinions in the area of health.

The evolution of electronic media and rapid development of mobile communication affect the nature of the functioning of individuals, households, communities and state institutions (Gani & Clemens 2006). Modern communication and information technologies that enter the market led to improvement of the communication process. The communication becomes faster, less expensive and flexibly. It adapts to changing market conditions and the expectations of demanding clients / patients (Kulka, 2014). Today's message recipients have much greater access to information and the freedom to choose the media (Syrkiewicz – Świtała, Holecki – Wojtynek, 2014). The recipients seek content on health. It is a new area for communication in the health promotion. Clients / patients seek communication channels and sources that are inexpensive and available at any time of the day. The channels must be adapted to the rhythm of modern life. Recipients of messages in the field of health promotion are becoming more demanding. They want to receive information in ways that are most convenient, accessible, tailored to their needs. It naturally forces the authors of these messages to provide more innovation in the preparation of content (Vilaseca-Requena et al., 2007).



The Internet gives the possibility of easier and cheaper collection of information about a health problem. This is especially important for patients within a group of people born in new technologies era (e.g. Generation Y- year of birth 1980 - 1995 (Gordon, 2014)). The use of the Internet and social media in health-oriented communication are essential forms of communication for those young people and becomes a prerequisite for effective communication (Syrkiewicz - Świtała 2014).

The social media create therefore space for an efficient and modern way of communicating with the target groups for the promotion of health (Evans, 2006). They are able to respond to undesirable social phenomena and test new activities in the field of health promotion and health education (Tokarz, 2009). In the digital era it seems to be a perfect idea of social media connection with the tasks related to the promotion and health education undertaken by state institutions. It has become a prerequisite to choose topic of this paper. The goal was to investigate whether the marshals' offices use social media marketing and social media tools to communicate with the environment in the field of health promotion.

## **2. Research objectives, materials and methods**

The main objective of the study was to determine whether, in the era of ubiquitous Internet, Polish marshal offices use internet marketing tools, with particular emphasis on social media marketing activities in the field of health promotion. Specific objectives of the study focus on the activities of Polish Marshal Offices in the field of health promotion and use of social media marketing tools:

- Identification of areas of activity of Polish Marshal Offices in the field of health promotion.
- Identification of marketing communication tools used by Polish Marshals Offices in activities in the field of health promotion.
- Determination whether and how the Polish Marshal Offices use the tools of social media marketing for their actions in the field of health promotion.
- Formulation of postulates of recommendations to improve the communication efficiency by Polish Marshal Offices in the field of health promotion.

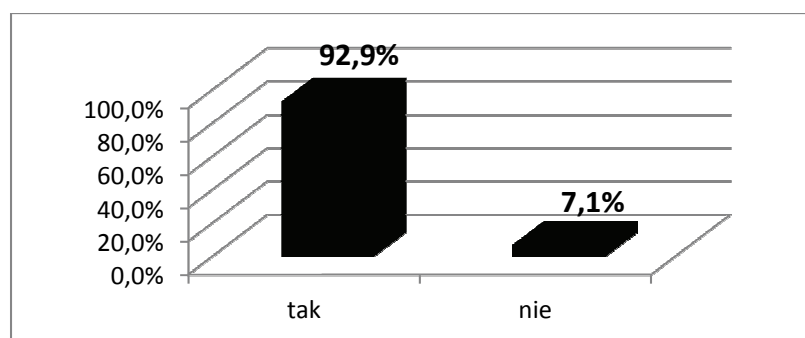
The research material was collected using an online survey (CAWI - Computer-Assisted Web Interview) and telephone interviews (CATI – Computer Assisted Telephone Interview). Obtaining statistical data followed in several steps. Invitation to participate in the study was sent by e-mail. The invitation consisted of a covering letter, information about the project implemented and a hyperlink to the questionnaire (CAWI). At intervals of several days three mailings was made. In order to complete the missing number of surveys a call center studio was launched.

The study was nationwide, as all the Marshal's Office were invited to participate. Consent to participation in the project expressed 14 offices. The samples for the study were purposeful.

## Research results

Taking action in the field of health promotion declared 13 Marshal Offices (92.9%). Only one tested Office (7.1%) did not engage in any activities in the area of health care. Marshal Offices' activities in the field of health promotion shows Figure 1.

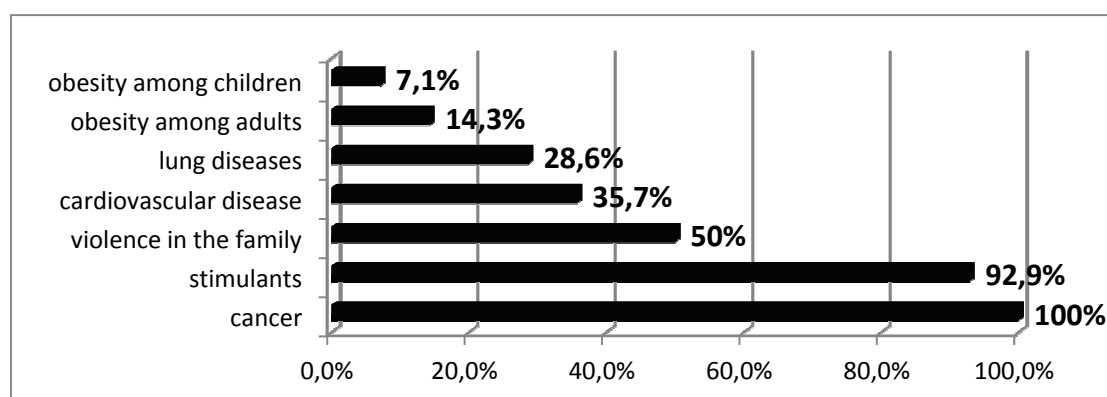
**Figure 1. The involvement of Polish Marshal Offices in activities in the field of health promotion**



Source: own.

Polish Marshal Offices prefer to engage in health promotion campaigns for the cancers (N = 14; 100%) and stimulants (N = 13; 92.9%). Also the actions to combat domestic violence are often taken (N = 7; 50%), cardiovascular disease (n = 5; 35.7%) and lung disease (N = 4; 28.6%). The least frequent activity in the area of health promotion carried out by Marshal Offices concerns of obesity among adults (N = 2; 14.3%) and children (N = 1, 7.1%). Figure 2 presents the topics of health promotion campaigns carried out by the Marshal Offices.

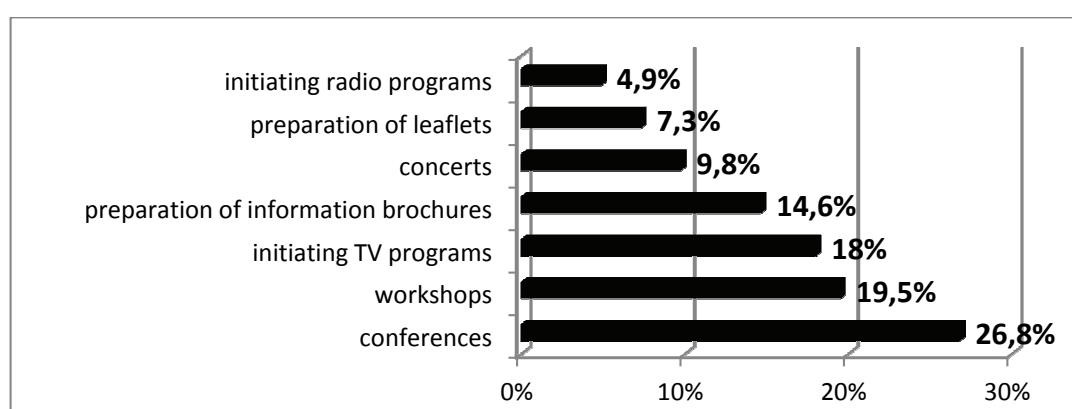
**Figure 2. The health promotion campaigns carried out by the Polish Marshal Offices**  
(results not add up to 100% - there are more possible answers)



Source: own.

Marshal Offices most frequently implement activities in health promotion through the organization of conferences (N = 11; 26.8%). Willingly used form of activity are workshops (N = 8; 19.5%), as well as the initiation of television programs (N = 7; 18%), and finally the development of information brochures (N = 6; 14.6%). Least likely health promotion campaigns are carried out by organizing concerts (N = 4; 9.8%), the development of information leaflets (N = 3; 7.3%), and initiating radio programs (N = 2; 4.9%). Methods of implementation of activities in the area of health promotion by Marshal Offices are illustrated in Figure 3.

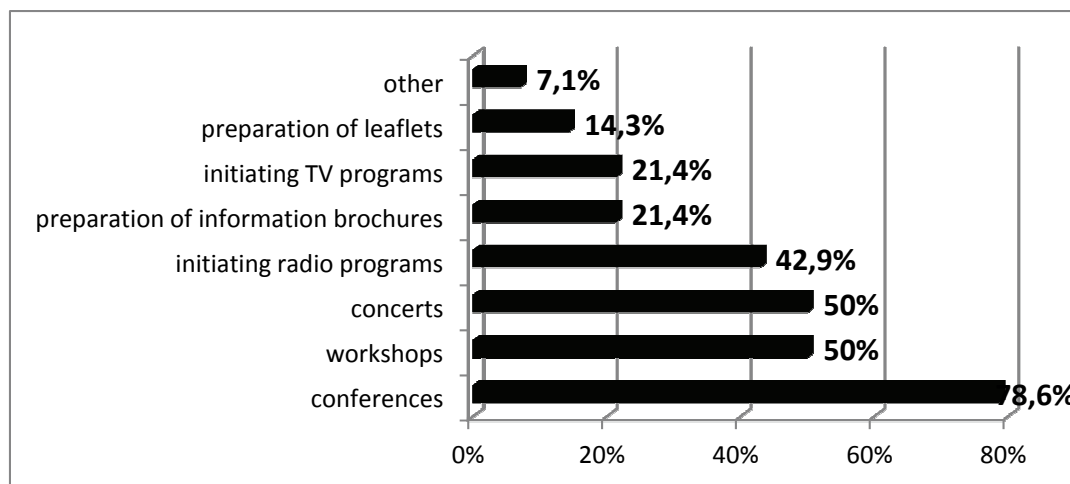
**Figure 3. The means of implementation of activities in the field of health promotion by the Polish Marshal Offices  
(results not add up to 100% - there are more possible answers)**



Source: own.

In the opinion of the staff from Marshal Offices the most effective ways to implement activities in the field of health promotion are the organization of the conference (N = 11; 78.6%), workshops (N = 7; 50%), concerts (N = 7; 50%) and to initiate radio programs (N = 6; 42.9%). For the less effective the respondents completed the development of information brochures (N = 3; 21.4%), initiation of television programs (N = 3; 21.4%), and the development of leaflets (N = 2; 14.3%). Figure 4 illustrates the most effective ways of implementation of activities in the field of health promotion in the opinion of Marshal Offices.

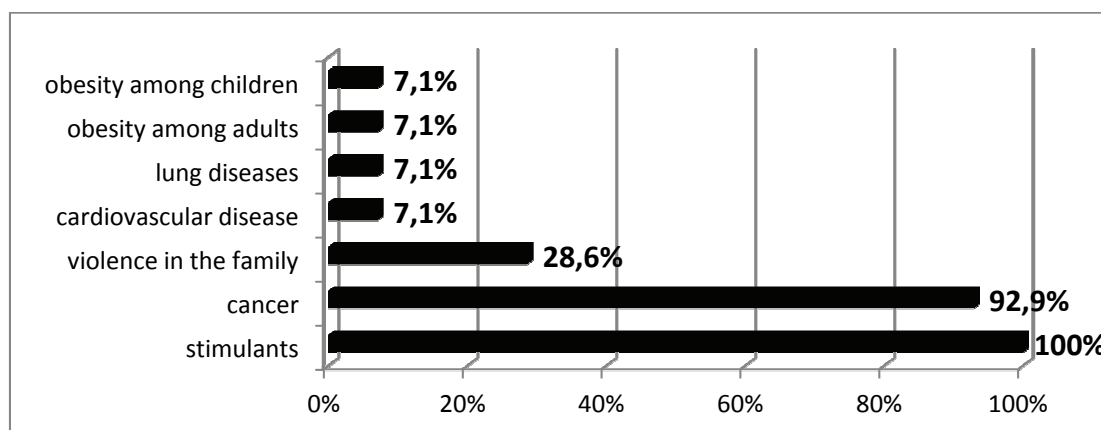
**Figure 4. The most effective methods of implementation of activities in the field of health promotion in the opinion of Polish Marshal Offices (results not add up to 100% - there are more possible answers)**



Source: own.

Marshal Offices' cooperation with NGOs in the field of health promotion is often dedicated to drugs (N = 14; 100%) and cancers (N = 13; 92.9%). Less commonly, third sector organizations engage in actions against domestic violence (N = 4; 28.6%), and the marginal importance to cooperation is the prevention of cardiovascular disease (N = 1, 7.1%), lung disease (N = 1; 7.1%) and obesity among adults (N = 1, 7.1%) and children (N = 1, 7.1%). The areas of health promotion implemented by the Marshal Office in cooperation with non-governmental organizations illustrates Figure 5.

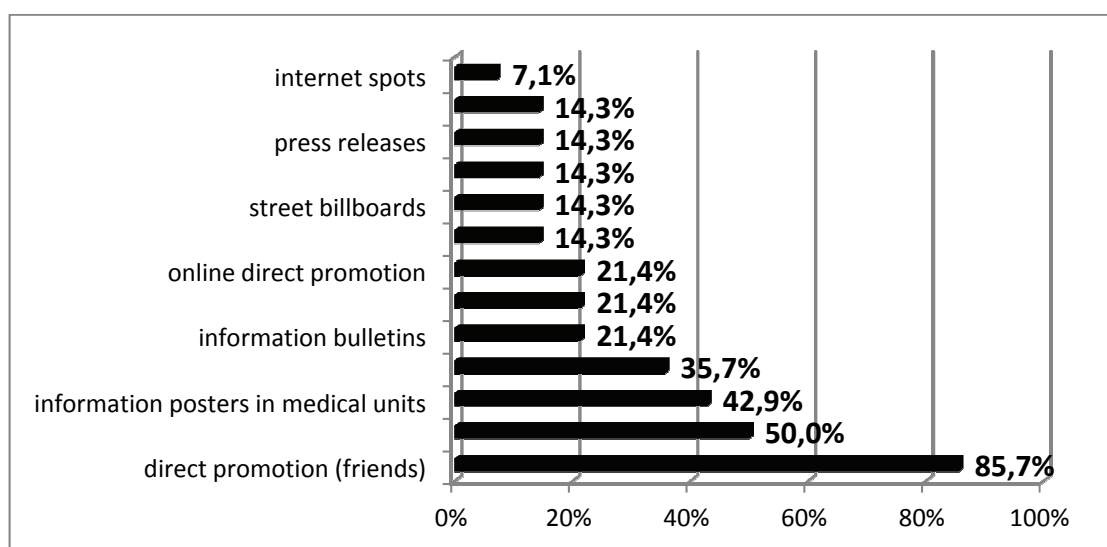
**Figure 5. The areas of health promotion carried out by the Polish Marshal Office in cooperation with non-governmental organizations (results not add up to 100% - there are more possible answers)**



Source: own.

In the opinion of employees of Marshal Offices the most attractive and convincing form of health promotion for patients is the direct promotion recommendations implemented by friends (N = 12; 85.7%). Effective promotion provide also doctor and pharmacist direct recommendations (N = 7; 50%), displaying posters in medical units (N = 6; 42.9%) and the issue of television spots (N = 5; 35.7%). Of less importance is the distribution of newsletters (N = 3; 21.4%) and information leaflets (N = 3; 21.4%), as well as direct internet promotion through recommendations from other users (N = 3; 21.4%). Of the least effective actions in the area of health promotion, respondents completed the street putting up billboards, posting press releases, email campaigns, and the issue of radio and online spots. Figure 6 presents the most attractive form of health promotion among patients in the opinion of Marshal Offices.

**Figure 6. The most attractive form of health promotion among patients in the opinion of Polish Marshal Offices (results not add up to 100% - there are more possible answers).**



Source: own.

## Conclusions

The Internet communication tools, including social media marketing tools, are entering the market in growing number of areas of activities of entities. (Evans 2006). The Polish Marshal Offices performing their activities in health promotion and education should take up the challenge to adjust to current requirements and expectations of different social groups. A large target group of health promotion campaigns conducted by the Polish Marshal Offices requires to adapt to modern trends of virtual communication. For modern audiences flexibility and availability of virtual information is very important. It is caused by a shift from traditional media like television, radio and newspapers to online media (Clarke 2014).

The change in technology should also revolutionize the functioning of the offices operating in the healthcare market, that want to get to the "digital" audience with their health-related transfers. These institutions, at various levels of their activities, may make profits from modern communication technologies if only they follow a new communication trends.

Almost all surveyed offices engage in activities in the field of health promotion. Activities of Polish Marshal Offices in this field consist mainly of cancer and stimulants health promotion. The organization of conferences and workshops turns out to be the most common and the most effective actions in the area of health promotion carried out by the Polish Marshal Offices. A half of the employees of Polish Marshal Offices considered direct communication of health promotion among patients to be the most convincing and inspiring confidence form. Far less important, in their opinion, are information posters and TV spots. In the opinion of surveyed offices the direct promotion recommendations implemented by friends are the most attractive form of health promotion. More than half of the surveyed agencies, despite awareness of the importance of direct communication, do not use social networking sites in the conducting health campaigns. One quarter of responding offices used in these activities Facebook, and very few You Tube. Half of the Polish Marshal Offices do not use any social media marketing tools. The remaining half declares active participation in discussions on Internet forums on health or in moderating online forum or consulting. The study can be concluded that in the era of ubiquitous Internet less than half of the surveyed Polish Marshal Offices uses social media and social media marketing tools in their efforts to promote health. It has been postulated to pay more attention by Polish Marshal Offices to social media marketing and social media tools in actions in the field of health promotion in order to improve the efficiency of communication with the "digital" environment.

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*Katalin TARI*

### **3.7. THE LINK BETWEEN COMMUNITY SITES AND ONLINE SALES**

#### **Summary**

In today's business life we have to be continuously innovative and competitive. We have always need to carry out surveys to define our target audience to keep our products/services/brand competitive compared to our rivals. Facebook and other social networking websites are the perfect virtual scenes, where businesses can be found easily. With the Internet becoming more popular and accessible, the relationship between companies and their customers has drastically changed. The sale process is becoming a more two-way communication relationship. However, the social networking sites can not only be used by companies to sell their products, but they can be used by potential customers to buy as well. Customers can easily interact with others, share their experiences and opinions about a product or a service. Facebook plays a very important role in brand building because it can have huge effects on the image I am trying to build. After finishing my research, I believe that the increasing lack of personal face-to-face communication can be replaced either by a virtual representative or a customer service online chat function.

I divided the group of 201 social media users by age, gender and region. Then, I carried out comparative analyses using the SPSS statistical software.

The results I received during my research helped me to successfully establish the two channels – social media sites, online sales – precisely and in parallel represent the target audience. I also received answers for most of the foresaid questions, which I am going to talk more about in this publication.

**Keywords:** online marketing, online target group, community sites, e-commerce

#### **Introduction**

Within a few years our world has undergone a radical change in the way we view our social values and consumer society. It is difficult to predict the outcome of these changes in an accurate manner. Internet was only used as a source of data a couple of years ago. However, the Web 2.0 revolution has completely changed the nature of human communication. Also by now it is not just about collecting data form on the Internet but exchanging data between users also. Today's business life means innovation and continuous competition. Companies have to have needs-assessment and define their target all the time (in many ways) in order to keep products/services/brand competitive compared to the market. The Facebook and other social networking and media sites are the channels, where companies can easily be found. Potential costumers spends a lot of their free time surfing on these websites and because of this, there is a perfect chance for them to learn more about various organisations advertised

on these type of websites. In today's world, potential buyers spend a lot of their time online, especially on social media sites, and this is where they have the opportunity to get to know the respective companies. The advent of internet there is a brand new, changed relationships between companies and customers. The sales processes are becoming into two-way communication relationships. With the social networking sites not only the sellers, but also another potential buyer can interact, share their experiences, opinions and impressions on customers.

*Keep in touch!*

This short sentence serves as an ending to most of the English-speaking private and even business conversations. Today, worldwide approximately 4 billion people use the Internet for both, personal and business purposes. In Hungary, 62% of population aged between 15 and 69 can be classed as Internet users. This means that 4,6 million of people go online at least once in every month. These Internet users spend a lot of their time on Facebook, Twitter, various online forums, social media and networking platforms. According to the data published by the Social Times, the number of Hungarian Facebook users can reach 4,4 million people, which represents 14th place in Europe and 39th place worldwide.

These numbers are on the rise and this provides a greater opportunity for the players of the consumer society. It is very common between consumers to obtain information about a product or service before purchasing. It is therefore, a legitimate question whether the online advertising through social media is an investment that pays off. The use of social media became very fashionable today. Almost all companies, large and small, can be found on Facebook. The Facebook IMEDIA PR Analytics lists an average of 12,271 Hungarian business related Facebook pages. Therefore, it is very important that companies know the shopping habits and identities of individuals using their social media sites, especially Facebook. Only companies that know what the members of their various fan sites want and how to provide them with a best possible offer can be successful in the online marketing used on social media pages.

### **Literature overview**

It would be especially important to make use of the advantage of the social media marketing that the two-way communication is possible and works on the online channels. At first it helps to understand the needs of their customers. On the second place, it should prepare for the unexpected events and new market members just as they should obtain some profitable information about what kind of product they should enter to the market with.

The point of view from the social marketing would be very important to develop at least one prepared marketing specialist who is looking into the company's affairs and who knows more about the online campaigns too. Therefore it would not be practical to give out these tasks to an external marketing company if they have small

or medium-sized companies (SMEs) on the online market (by personal interview with an online specialist).

*Whether these companies are using well, or can they make use of opportunities offered by the social media platforms?*

Ferenc Pécsi is a Hungarian online communication expert who says that only few companies can benefit from the opportunities of these social networking sites. Most of the companies are using these sites only like an extension of their marketing communication channel or for sharing their corporate information and ads on their websites. Many companies are striving to have more and more fan on the social websites, but the experts say it doesn't mean much in the terms of marketing. The companies with social networking profiles are members of the social networks who can draw the attention of their consumers on themselves and should have an advantage against the firms, who do not have any social networking site profiles, furthermore they can expand their client base and should influence the decision of customers or they can increase their sales too.

So the original purpose of marketing is therefore preserved - increase their own sales - only the necessary devices are changed. To be a good business man or woman and to maintain the advantage, it is a very important basis that the company can reach their target group/market through many more channels and it will help to grow the number of their websites visitors, after then create a buyer for the company.

The first social networking sites were for the people-to-people (C2C) contacts, but in my opinion they are becoming shifted between business-to-people/costumer (B2C) nowadays as well.

The social networking sites can be used for the firms as a marketing tool and as a marketing method as well. As a marketing tool of your business you can create a social profile or a fan page with the basic information of your company and with this tool your visitors can get much more information about your firm if there is your own website link to seek out the company. If you are using the social media platform as marketing method than it is no more necessary to visit your own company's website. The social page gathers all the information, giving a chance to purchase or to order directly your products (vállalkozásonline.hu).

Larry Webber explained accurately why the companies should join the social media network in his book he wrote in 2009. These reasons are the following:

- customer acquisition (called landing pages);
- targeted branding;
- adopt/develop the relationships with customers, with suppliers, with manufacturers and with distributors too;
- research and development;
- amplifying the communication within the company as well.

According to the "Creative Communications Agency" you have to perform the following tasks during a social media campaign on the Facebook:

1. Develop the strategy: to define the main goals, to analyse the competitions, to integrate the social networking site to their own website, to prepare their 1-2 months schedule, to review their resources.

2. Forming a creative concept design: to develop their social media image which is created in harmony with the other creative materials of the company.
3. Development, setting: creating a community site, the subpages and the plug-in elements too (landing page, welcome – and information screen about the company, YouTube channel, RSS feeds)
4. Management of the page and the application: promotion, dissemination, expansion of their follower-camp, content-marketing, dialogue-generation, moderation, administration, monitoring, evaluation, evaluation of their strategy, modification, analysis of the monthly reports, advertise the whole campaign management.

Within the Facebook are a lot of possibilities for the businesses to promote their activities and products. One of the simplest methods is if the social media users click on the „like” button on their side. This may be achieved for example giving them a coupon or a discount after liking. With the „like” of these users the company can reach all of the friends of the user who also receive information about the company. The companies can create events as well. If these event invitations are accepted, the news of this event can be seen on the social media news-wall so it can reach the acquaintance of the users they know. It is like a virus spreading.

I will write about the relationship between online marketing and social media. The following figure shows the proportions of taking advantage of each social networking sites in the B2C and also in the B2B sector. It is visible that the most popular social networking site is the Facebook in the case of the B2C sector, while LinkedIn by the B2B.

**Table 1: Use of social media in B2B and B2C sectors**

<b>B2C</b>		<b>B2B</b>	
Forums	1%	Pinterest	0%
Google+	1%	Forums	1%
Pinterest	2%	Google+	3%
YouTube	4%	YouTube	4%
LinkedIn	5%	Twitter	16%
Twitter	10%	Bloggning	19%
Bloggning	11%	LinkedIn	28%
Facebook	66%	Facebook	29%

Source: based on Social Media Examiner 2013 research

Furthermore, the E-commerce can be classified in several ways:

- Trade between B2B companies
- B2C commerce between businesses and consumers
- B2A trade between companies and public administration
- C2C consumer trade among themselves
- Relationships between public administrations and consumers C2A
- A2A between the relations of the administrations (Talyigás and Mojzes, 2004)

The spread of the Internet has brought the possibility that the businesses are able to sell their products through this virtual tunnel. They can access more layers of the buyers, for example customers who are otherwise would not buy from them due to geographical distances but they can now present their products and their services over the Internet and the web-users can even order from them.

As it was mentioned earlier, the social networking sites can be used for the firms as a marketing tool and as a marketing method as well. The social media network sites are helpful to sell the products for example with the application called Facebook ShopTab. This allows the companies to offer the complete web shop supplies on their Facebook sides. They have to pay for this service and they are offered with three price plans. This application should be useful in addition with the existing webshop and taking advantage of the opportunities offered by social networking sites. (Blog.bluedesign.hu) The stores placed in FacebookTabs, the so-called "f-commerces" or "f-commerce" which enables that Facebook-visitors doesn't have to leave the original homepage but they can buy 'indoors'.

They offer the products within the social media network in order to make companies use the advertising via news feed as well, because it increases the number of their visitors and also their sales greatly. (marketingmorzsák, 2013)

Despite this possibility, 93.5% of the Hungarian companies who are on social media channel today, are not using the Facebook to sell, in fact, 90% of them communicate poorly, and does not taking advantage of the opportunities offered by either side.

## **Current research**

The requiring decision problems are in a mutual relationship with the marketing plans and with the marketing information systems. In the first step I have collected the problems identified of my research - thus I examined the use of online sales and social networking sites - and then I had to sketch the decision alternatives. Than the precise hypotheses were formulated.

## ***Method***

This research was done via a quantitative method, using a questionnaire. The polling took place between 1<sup>st</sup> August and 1<sup>st</sup> of September 2013. The surveyed participants took part in the research through a well-known social networking site – on the Facebook – and were selected at random.

For surfing habits, social networking sites (Facebook) and shopping online testing variables based on gender (male-female) statistical analysis of parametric independent sample t-test or non-parametric tests Mann-Whitney U test and cross tabulation (contingency tables) procedures used Chi 2 -tel. For some variables to examine the differences between the age groups (4 groups), ANOVA (one-way analysis of variance) or nonparametric Kruskal-Wallis H test was used and cross tabulation analyses Phi & Cramer's V coefficient. The correlation between the variables for testing – Facebook usage and online shopping habits – Pearson's correlation was used.

Statistical – comparative – analyses were performed using SPSS 19.0 for Windows program has helped. I divided the group of 201 social media users by age, gender and region. Then, I carried out comparative analyses using the SPSS statistical software.

### ***Hypotheses***

1<sup>th</sup> hypothesis (H1) is that with the popularity of social networking sites is increasing, the proportion of online sales are increased too

2<sup>nd</sup> hypothesis (H2) is that men became more open to the possibilities offered by online shopping earlier than women

3<sup>rd</sup> hypothesis (H3) ) is that higher educated people with a bigger prestige, are buying more through the Internet. My last two hypothesis are looking at possible ways to advertise through social media and networking sites.

4<sup>th</sup> hypothesis (H4) it is worth to advertise through Facebook, as this ways companies can attract costumer attention towards their products or services.

After stating the hypotheses, I recorded the boundaries of research and the available research information. Research of the available information focused on already existing published researches and those available online. My next step was the detailed planning of the research.

### ***Design and procedure***

A research project is made up of more step constitutes each other roots, each of which are non-hierarchical, but also functionally related, such as consumer queries we continued our work. The questionnaire contained 19 questions, which can be divided into four parts.

Part 1: Internet usage patterns (questions 1-4)

Part 2: the relationship between social media and networking sites and online shopping (questions 5-6)

Part 3: online shopping habits (frequency, location and popularity. 7-17 issue) and

Part 4: vision (18-19 issue)

### **Results**

*1<sup>st</sup> hypothesis (H1) is that with the popularity of social networking sites increasing, the proportion of online sales too*

The hypothesis is only partially confirmed because neither subjects of in-depth interviews nor survey respondents have gave clear answers. In my opinion social media advertising is rather for awareness-raising than increasing sales effectiveness.

The result of this question is precisely 3,41, which means an intermediate result on the basis of 201 case reviews. Respondents have quoted the difficulty of measurement at

question no. 9 because it's nearly impossible to measure it about many components that effects on it.

In case of banners click rate is about 1-2 % at normal websites. Social media platforms have a great ability to put advertisements especially for target audiences. This makes declaring find their ways to target groups and this affects higher click rates as well.

*2<sup>nd</sup> hypothesis (H2) is that men became more open to the possibilities offered by online shopping earlier than women*

The hypothesis is true because question no. 9 had a significant result on the basis of gender. The question: „When did you buy the first time via Internet?“ has resulted that men used to buy on the Internet for a long while significantly, which means about 1 year on the average.

*3<sup>rd</sup> hypothesis (H3) ) is that higher educated people with a bigger prestige, are buying more through the Internet. My last two hypothesis are looking at possible ways to advertise through social media and networking sites.*

It has resulted a partly verification because there's no relevant differences in online shopping statistically, but there're tendencies showing people with MA (or more than MA) qualification buy via Internet more often (quarter terminally). People with BA or secondary school / technical college usually buy less frequently (semi-annually).

*4<sup>th</sup> hypothesis (H4) it is worth to advertise through Facebook, as this ways companies can attract costumer attention towards their products or services.*

It's true on the basis of answers for question no. 5 which has resulted people find well positioned and nicely targeted (so which is able to reach the potential target audience) social media marketing quite effective. However it's important to note that there's no place for every brand on social networking sites.

## **Conclusions**

The primary conclusion of the research is that users do not even prefer advertisements used on social media pages and the major drawback in online sales is the lack of personality. The secondary conclusion is that in online community personalities cannot be separated sharply for private and business-like. Therefore, the conclusion of the in-depth interviews is honest, open space of Internet, avoidance of subservience/superordinate and angles of humanity are the most important is social media advertising.

In summary, it is concluded, that companies that do not use Internet for marketing purposes, have a disadvantage compared to other companies that have a bigger online presence.

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### **3.8. REASONS OF TAX EVASION IN IRAQ AND HUNGARY**

#### **Summary**

The taxes were known the only financial source for the state or the governing body since ancient times. The taxes are considered as a source that combines the necessary funds to meet the public expenditure to provide services of education, health, security, etc., With the development of the modern concept of the state the tax has become beside the financial goals, other different purposes such as political, social and economic goals that the state is seeking to achieve through the taxes.

The main reasons for tax evasion in Iraq with 84,91% is the “Tax Awareness” and in Hungary with 80,65% is the “High Tax Rate”. The main technique (84,91%) used in tax evasion in Iraq is “Hiding Activity” and in Hungary (51,61%) is the “Distribution of Dividends to Ghost's Partners” and “Hiding Activity”.

**Keywords:** Tax, Tax evasion, Tax evasion techniques

#### **Introduction**

Tax in modern times cannot be deducted without raising impact on consumption, saving, production and investment. Moreover, the taxpayers are working hard to get rid of the tax in different ways. Throughout this study, the researchers will examine to show the reason's effect that taxpayers follow to evade taxes and the correlation with the culture society. Furthermore, the researchers will show the impact of the economic and political climate on tax evasion and to what extent the views of convergence (or divergence) are correlated with the research sample.

The study will use a questionnaire distributed to a sample of taxpayers in both Hungary and Iraq. The questions of the questionnaire will focus on the causes that effect on the tax evasion. This study will also study the variables such as experience, certificate and specialist.

#### **Objectives and Methodology**

##### ***Problem statement***

The tax evasion will be reflected directly on the treasury of state and therefore it affects negatively on the level of services provided to its citizens. The tax evasion has significant effects on the social and economic goals that the state is seeking to achieve

throughout the tax. In general, these taxes effects on the national economy and on the society; therefore the problem statement will be as follows:

- What is the effect of each reason on tax evasion?
- What is the most common reason effect on the tax evasion in Iraq and Hungary?
- What is the most common technique used in tax evasion in Iraq and Hungary?

The main objectives of the research were to identify the most common reasons on the tax evasion in Iraq and Hungary, and to identify the most common technique used in tax evasion in Iraq and Hungary.

### ***Hypotheses***

The study assumes that there is variation in the causes of tax evasion, and it is divided to the sub following sub- assumptions:

- The main reasons for tax evasion in Iraq are all of the state policy expenditure, tax awareness, in addition to administrative and organizational reasons.
- The main reasons for tax evasion in Hungary are the high tax rates in addition to punishment evasion of tax evasion.
- The main techniques used in tax evasion in Iraq are the unreal documents and hiding activity.
- The main techniques which are used in tax evasion in Hungary are the distribution of dividends to ghost's partners and the change the invoices.

### **Literature**

Neck, Wachter and Schneider (2011) investigated how the possibility of tax avoidance affects the extent of tax evasion and hence the shadow economy. Using comparative statistics the study revealed that the complexity of the tax system affects participation in the shadow economy negatively. Furthermore, the study demonstrated that a decrease in the maximum acceptable number of working hours in the official economy increases the labour supply in the shadow economy.

Mughal and Akram (2012) examined the relationship between variables of reasons/causes of tax avoidance and evasion. They analysed the situation by using percentages arithmetic mean standard deviation variance analysis central limit theorem cumulative normal distribution calculator factor analysis and correlation technique. The results indicate that all variables of reasons/causes of tax avoidance and evasion in Pakistan are correct. Furthermore, there exists a highly significant positive relationship between individual variables of reasons/causes of tax avoidance and evasion in Pakistan at 100% significance level.

Akinyomi and Okpala (2013) examined the factors that are influencing tax evasion and tax avoidance in Nigeria. The results of the analysis revealed that the low quality of the service in return for tax does significantly influence tax avoidance and evasion in Nigeria. Furthermore, tax system and perception of fairness, low transparency and accountability of public institutions, and high level of corruption do significantly influence tax avoidance and evasion in Nigeria. The study recommends that urgent

steps should be taken by public office holders to live up to expectation when it comes to transparency, accountability and the war against corruption.

Tax evasion is the main problem of Pakistan (Khan and Ahmad, 2014) which needs to be eliminated by following of recommendations that tax system must base on the ground of realities, tax rates should be low. There should be proper check and balance of government, tax awareness in public should arise by different channels.

## **Tax evasion**

### ***Definition of tax evasion***

Modern tax legislation did not provide a definition of tax evasion but was confined to census forms and manifestations, leaving the definition of jurists and commentators, because any definition cannot include all techniques evasion. Tax evasion is a high-risk lesion, the taxpayer considered evading from pay the tax if resorted to some techniques of cheating or fraud to hide the fact that the taxable amount.

William (2010) defined tax evasion: its core involves an element of fraud perpetrated upon the treasury and typically carried out through some form of concealment or deceit with the intent to evade or defeat a tax or payment of the tax.

Manea and Manea (2015) define as “Fiscal Fraud, appoints most often a crime to law, so this concept is always used in a negative way and is different from that designates a legal tax avoidance possibilities offered by clever use to mitigate or even circumvent the law to tax”. Researchers argue that tax evasion is the not paying tax to financial authorities deliberately, in fully or partially, for any reason whatsoever.

### ***Reasons behind tax evasion***

There are many reasons of evasion, and can't be identified in this research, because they are depending on the financial legislation economic, social and political conditions, the level of public awareness the efficiency of appliances and the effectiveness of the procedures, but the researchers try to highlight the most important of these reasons as follows (Olimat, 2013)

1. High tax rate: It considers that taxpayer pays to state more than it deserves, in addition to the sense that the amount paid will effect on his business activity.
2. State policy in expenditure: Means the state directed tax revenue in the intended destination, and the taxpayer touch it themselves of community, and public services and providing them with security and stability in their lives.
3. Tax awareness: It is the taxpayer's awareness of the importance to pay the tax and benefits that would accrue to him and to the community.
4. Criminal reasons: Tax evasion is a crime which is punishable by law, if there were a deterrent punishment on the evader paid Him/Her/It to pay the tax on time, and vice versa.
5. Economic reasons: The evasion rate is lower in times of thrive and prosper than times of economic crisis.

6. Administrative and organizational reasons: This is reflected in the complexity of administrative procedures for assessing and collecting tax.

### ***Tax evasion techniques***

Usually tax evasion technique limited of hiding income in fully or partially for the financial authority. It would be fully hide by not recognizing the existence of activity originally or activity that has achieved a net loss during the past financial period. The hidden part of income shall be one of two ways as well, either through increasing the amount of expenses through fake employment contracts or bring fake receipts for expenses etc., and the second by decreasing the sales amount through the hide some receipts or not to prove some deals in the accounting records, and both methods are used one (not limited to) the following evasion technique:

1. Offer the taxpayer's annual tax declaration based on unreal documents.
2. Offer the taxpayer's annual tax declaration on the basis of the absence of documents.
3. Distribution of dividends to the partner or partners ghost with the intention of reducing the share of his profits.
4. Change the purchase or sale invoices with the intention of reduce the profit or increase losses.
5. Hiding activity or more activities subject to tax.

### **Results**

The research was conducted in Iraq and Hungary among selected taxpayers. The general information about the sample is summarized by Table 1, where the respondents are distinguished based on their education level, their specialization or fields of work and their experiences in years.

As Table 1 shows the bulk of the research sample has BSc degree in both countries, and the ratio of BSc in Iraq's sample 67.9%, while 77.4% in Hungary. While the large ratio in Specialist found in management, the ratio in Iraq 39.6% and in Hungary 54.8%. A relatively high group of economists was in the Iraqi sample, and people with specialization in accounting represented roughly the same rate in both countries (near 20%). Finally, from experience axis found that 45.3% from sample have 6-10 years experiences in Iraq, while in Hungary 51.6%.

*Table 1: The sample data*

<i>Certificate</i>	<i>Iraq</i>		<i>Hungary</i>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Secondary school	9	17.00	2	6.50
BSc	36	67.90	24	77.40
MSc	4	7.50	3	9.70
Other	4	7.50	2	6.50
Total	53	100.00	31	100.00
<i>Specialist</i>	<i>Iraq</i>		<i>Hungary</i>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Accounting	11	20.80	6	19.40
Management	21	39.60	17	54.80
Economic	18	34.00	7	22.60
Other	3	5.70	1	3.20
Total	53	100.00	31	100.00
<i>Experience (years)</i>	<i>Iraq</i>		<i>Hungary</i>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Less 5	12	22.60	7	22.60
6 - 10	24	45.30	16	51.60
More than 10	17	32.10	8	25.80
Total	53	100.00	31	100.00

Source: own research

***Reasons of tax evasion***

There are many reasons in tax evasion but we focus on the main six reasons. In the Table 2 we found that the samples full agreed only in “High Tax Rate” with “Strongly Agree” 28.30% and 80.65% respectively in Iraq and Hungary, while simple agreement in “State Policy in Expenditure” with Strongly Agree (60.38%) and Agree (32.26%) respectively in Iraq and Hungary. Finally, there is no agreement in Tax Awareness, Criminal Reasons, Economic Reasons and Administrative and Organizational Reasons.

*Table 2: Reasons of tax evasion ratios*

	<i>Iraq</i>		<i>Hungary</i>	
		<b>%</b>		<b>%</b>
<b>High Tax Rate</b>	Strongly agree	28.30	Strongly agree	80.65
<b>State Policy in Expenditure</b>	Strongly agree	60.38	Agree	32.26
<b>Tax Awareness</b>	Strongly agree	84.91	Disagree	51.61
<b>Criminal Reasons</b>	Strongly agree	75.47	Strongly disagree	54.84
<b>Economic Reasons</b>	Disagree	84.91	Agree	29.03
<b>Administrative and Organizational Reasons</b>	Agree	54.72	Disagree	32.26

Source: own research

By reference to the first hypothesis we find that they agree to a certain extent with the results, but we find that among the reasons of tax evasion in Iraq (and that have been added through the results) are both of “High Tax Rate” and “Administrative and Organizational Reasons”.

While by reference to the second hypothesis we find that they agree only with “High Tax Rate”, and not agreed with “Criminal Reasons”, in the same time we find that among the reasons of tax evasion in Hungary (and that have been added through the results) are both of “State Policy in Expenditure” and “Economic Reasons”.

### ***Tax evasion techniques***

Table 3 shows that the samples full agreed in “Absence Of Documents” with “Disagree” 81.13% and 41.94% respectively in Iraq and Hungary, and “Hiding Activity” with “Strongly Agree” 84.91% and 51.61% respectively in Iraq and Hungary, while simple agreement in “Unreal Documents” with Strongly Agree (66.04%) and Agree (35.48%) respectively in Iraq and Hungary. Finally, there is no agreement in Distribution of Dividends to Ghost's Partners and Change the invoices.

***Table 3: Tax evasion techniques***

	Iraq		Hungary	
		%		%
<b>Unreal documents</b>	Strongly agree	66.04	Agree	35.48
<b>Absence of documents</b>	Disagree	81.13	Disagree	41.94
<b>Distribution of dividends to ghost's partners</b>	Disagree	60.38	Strongly agree	51.61
<b>Change invoices</b>	Strongly agree	73.58	Strongly disagree	41.94
<b>Hiding activity</b>	Strongly agree	84.91	Strongly agree	51.61

Source: own

By reference to third hypothesis, we find that they agree to a certain extent with the results, in addition to change “Invoices”.

While by reference to fourth hypothesis, we find that they agree only with “Distribution of Dividends to Ghost's Partners”, and not agreed with “Change the Purchase or Sale Invoices”, in the same time we find that among the reasons of tax evasion in Hungary (and that have been added through the results) are both of “Unreal Documents” and “of Hiding Activity”.

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How to use theory in practice? – it is one of the most important issues of our time. Applying the newest research results and to build them into the business and educational practice may give an important advantage for all organizations. This book presents a wide collection of the latest results of international authors representing the main managerial tasks and management functions in different countries which may be used by researchers, students and the representatives of the business sphere.

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This book discusses the main management functions and managerial tasks in the light of the rapidly changing economic environment of our time. The monograph outlines case studies and research results from experienced international team of experts and academicians, it offers a diverse and complex insight into different aspects and fields of management and may be a useful resource for practitioners, management scholars and students as well.

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The book “The role of management functions in successful enterprise performance”, edited by Prof. Bylok and Assoc. Prof. Tangl, is a valuable source of knowledge on management studies. Readers may find different theoretical and practical analyses about modern management tools and may get the experiences of the authors from different countries and industries. I recommend this book as a valuable reading for those who are dealing with managerial issues in practice or in the field of education.

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