Challenges for Contemporary Management
Challenges for Contemporary Management

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Cracow – Saint Petersburg 2016
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Globalization as a complex process influences the whole structure of the world economy immensely. On the one hand, interconnections between individuals, institutions, and states significantly increase, bringing gross product growth and prosperity to different human communities. On the other hand, our modern world has turned into the world of constant changes, adjustments, and contradictions, depending on ever changing demands of the market economy system. Besides, we all encounter multi-level obstacles – individual and public – on our way to successful cross-border cooperation.

Those challenges make us seek for new ways of efficiency increase and cooperation among organizations and their activities, new methods of management, maneuvering within the terms of tense competition both on local and international levels.

If there is an entity involved in solving any of these universal problems, then leave it to universities to do it; as there is no contradiction between the universal idea of the world’s diversity and the unity of the whole humanity. The aim of the conference is to find new bridges for cooperation, both scientific and business. In this context, the role of universities rises considerably; and cooperation between them is a ‘let-us-build-bridges’ strategy which unites the researchers all over the world. It is the only educational environment that forms such vitally important managerial and research skills of new generations of decision-makers to come.

The rise of new corporative risks is caused by the latest geopolitical implementations which hurdle the very essence of business interests. They make business community more socially responsible, simultaneously involved in developing new, modified standards of its usual activity, including ecological side of it, which is becoming a more and more consistent part of it ‘by default’. The results of researches performed by the scientists of the universities from Poland and Russia are published herewith. They reveal the scientists’ new quests and aspirations to find answers to all of those challenges of modern life, both visionary and acute, which are of great concern of Polish, Russian and other businesses throughout the world.

Scientific Editors
Efficient Communicative Strategies of Market Agents Within the Cyber-Economy

New marketing tools in the digital economy meet the need to develop communication as the core function in the value creation. The transition of company from “value creation chain” to “value creation network” reflect the significant role of communication to build efficient agents’ strategies on cyber-market.

The information and communication technologies (ICT)’ development created the new environment and new possibilities for acting on the market with the digital economic models and virtual forms of communicating.

The communication in the post-industrial world represents the key-element of the efficient strategic management. The strategic communication reflects the new systemic set of practices, within the corporations’ world, of conscious awareness about the planned and professional process that is necessary to build a company’ future perception.

The market agents build their strategies on the previous experience, but in the changing virtual space, the past is even more flexible that the present or future. Digital economy uses not only the advantages of the new cyber-economy, but forces the companies and individuals to implement better thought-out and more detailed strategies of communication.

An agent in the virtual space builds her or his strategy on the basis of the specific competences to anticipate the different points of view of other individuals or organisations and to predict the diverse eventual meanings that an action is able to produce. Today, the work with the meanings and interpretations more and more becomes important part of any managerial making decision process. The choice of resources, of areas for supply or for sale, of actors involved, has a deeper and stronger impact on the
potential return on investment – both, when the actor invests in assets or in her (him) self as a human resource.

The essential element of the efficient strategy is to think and to anticipate the consequences of a choice, and within the digital economy the choices made are more and more transparent – individuals’ strategies are reflected at their social media profiles, the corporate structures are well regulated and are obliged to some compulsory reporting, financial and non-financial, and due to the transparency of personal communication and due to the journalist work, the corporations have less and less possibilities to stay hidden or to make internal decisions without any representation outside.

Market agents are constrained to take into account, that every internal choice or decision can be promulgated, the strategic communication serves to prevent any incorrect or harmful for the company’s reputation and avoid the negative impact of misunderstandings of ambiguous expressions or images. Within the interconnected information society and knowledge economy, the connotations of meaning are changing and, at the same time, play very important role. That is the reason to identify the essential ideas of a corporate unit or of an individual to build the brand of a market agent. Essential groups of the positive and negative connotations are presented in the table below (table 1), concerning the market behaviour of an agent with a strategic prospective:

<table>
<thead>
<tr>
<th>Table 1. Connotations of market agents’ strategic communications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market</strong></td>
</tr>
</tbody>
</table>
| **Helpful for success** | • Competition leads to efficiency  
• Increase choice and individual freedom for activities | • Agent means active positioning, including the mobility and openness  
• Agency has a sense of specialists’ competencies | • Long-term strategic vision includes the sustainable development principles |
| **Harmful for brand** | • Aggressive war for customers | • Frauds against taxation laws and lie to customers | • Profit-driven strategy reflects the interests of shareholders and not of all stakeholders |

*Source: prepared by the authors.*

Taking into account that the communication integrates the aims and objectives of an agent for partners and customers, to adjust the flows of resources, the communicative strategy should also include the targeted auditory and, eventually, concern some interested groups of people who are qualified as potential stakeholders. The communicative strategy for corporate structures includes also the work inside organisation, especially in the network organisations.

The cyber-economy creates the new conditions and substantial contexts for the communicative strategies, making more complex the challenge to align the influences of virtual agents. The guerilla marketing and virus messages can be very useful to create a positive image, but can also undermine the whole trustful climate and confidence between partners [Pokrovskaya et al., 2016]. The ethical issues become more important with the
transparency and accessibility for everyone to any information [Kennedy, 2004], especially when the information produces emotional reaction [Murphy et al., 2008].

Even with the virtual space opportunities, the connections between people and companies can be closer due to the geographic factor that explains the development of clustering processes [Pokrovskaia & Wei, 2015]. The enhancing of clusters development reflects the insufficiency of the existing cyber-space for the efficient communication [Gruzelier & Egner, 2004]. The neuromarketing assures more direct translation of affective signals form one agent to another one, but, at the same time, it will decrease the potential possibilities for the specialists in the virtual communications, because of the necessity of being opposite to the will of seeming. The direct connection to the feelings of other people will solve the problem of different symbols [Song & Schwarz], or of the connotations.

But the forms, images and words as significant representations of the complex reality are still important for a successful communicative strategy of a market agent.

Conclusion

The up-to-date form of the cyber-economy already created a new virtual space for communication. But, the fact development of information and telecommunication technologies (ICT) will produce the new forms for messages and signals' transfer. The distinguishing between the human and the machine functions and roles in the process of communication in future will be forged on the basis of the actual formulating of the essential values introduced into the evolution of the ICT.

Bibliography


For cities with rich cultural heritage, museum management in recent decades is a current direction of development of management theory and practice. Due to considerable changes in the role of museums in the system of social organization and changes of their main functions, museum activity is becoming increasingly important for not only the formation and development of the cultural landscape and cultural tourism, but also for the life of the community. A variety of types and formats of museum activity allow them to deal with arising complex problems and remain competitive among other cultural and leisure institutions. This article focuses on such areas of modern museum activity as events and special museum programs: their features and role in the implementation of museum’s functions. It also provides the results of the study on the special programs in medium and small museums in St. Petersburg.

The transformation of museums that is happening today is inseparable from the period of economic instability. One of the unique features of museum as a social institution is that at the same time it functions as a part of the state apparatus and free market entity. Both Russian and foreign researchers point out that this situation has changed the role of museum in the system of social relations. It also encourages museums to develop, search new ways to organize their activity, new sources of funding, and be more client oriented (Burov, 2010; Nikishin, 2001; Sapanzha, 2007; Rowley, 1999).

In the late 20th century museum turned from the ordinary storage for the artifacts and antiquities into the actor of the cultural and education systems. This transformation is linked with the transition of the museum as a cultural service provider to the institution that creates people’s cultural interests. In case of the culture division into high culture for the elite and low culture for the mass audience, the museum in the past would represent high culture and thus worked only for the narrow segment of the audience.
New role of museum means a shift towards its social functions, a switch from the focus on its collection to the communication with its visitors, a new vision of the museum, as an institution that does not discriminate against certain categories of citizens, but makes them equal and aims at the creation of one “big society” where everyone has an access to culture. Unprotected, marginal groups, as well as the younger generation become the target audience. Research papers on the role of museums in the socialization of such vulnerable groups as orphans, patients with Alzheimer’s disease, mothers with small children and others, start to appear. These studies show that museums not only assist in social adaptation, but also improve the quality of life in general (Gil, 2012; Makeeva, 2011; Byrne, 2013).

All museum functions may be divided into two groups, based on their orientation: object oriented and subject oriented. First group includes all aspects of museum activity directly related to collection and exhibition:

1. **Preservation.** Museum is still a place for keeping pieces of art and artifacts under required conditions.

2. **Research.** Museum is not static. Its collection is being added to and updated constantly. Researchers are looking for new exhibit items. Therefore, large scientific work is conducted.

3. **Exhibition.** Museum is not a collection of random objects. They are organized in a way that every visitor could understand their value and significance.

4. **Subject oriented functions are connected with all museum activities focused on visitor:**

5. **Education.** A large number of studies on museum pedagogy confirms the fact that museums have enormous potential in education. This could mean inclusion of museum in school and pre-school education (lessons in museums) or additional education such as lectures in museums.

6. **Organization of free time.** Visiting the museum is just one of the possible options to spend your free time. In this case, museums are competing for the attention of visitors with theaters, movie theatres and even shopping centers. (Sullivan, 2013).

7. **Socialization.** This function is performed in two contexts. On the one hand, it is a significance and usefulness of museum in special needs education (Nezamayeva, 2007), work with senior citizens, and people at risk (Makeeva, 2011). At the same time, museums work with groups of people who need re-socialization. Other aspect of socialization function of museums is the creation of specific discourse, information field in which only museum visitors can be involved.

8. **Another perspective of museum social function is museum as agent of social change.** Museum acquire this role also in response to its changing status as social institution. Acting as agents of social change, museums not only solve their tasks, but also assist in accomplishing global social goals and finding solution to serious social issues (Sheppard, 2000).
Emphasizing the priority of the second group of functions along with exposition flexibility and implementing new technologies expands the scope of services offered by museums and create new forms of museum activities. We believe that there is a delay in mentioning and analysis of these forms in scientific literature that cause terminological uncertainty.

In this paper we would like to consider two areas of museum activities: museum events and special museum programs. From the organizers’ point of view, special event is an event held once or with certain frequency beyond the usual program or sponsor events. From the consumers’ point of view, it is a possibility of entertainment, social and cultural interaction beyond everyday life. Researchers do not examine events in museums and other cultural organizations specifically. There is also no definition for the concept of museum event. That is why the definition of “museum event” is given in this paper, based on the definition of the term “event”. It is a special event held once or with certain frequency by the museum itself or with a help of other organizations that requires certain arrangements and is different from everyday museum activities.

Speaking of museum events, we should state their role in museum activity and define to what event we can apply this term. Gordin, L. Khoreva, M. Dedova in their article mention what type of events may be called “special”. Large number of Russian and foreign museums offer to rent their spaces for commercial events which, according to the authors, cannot be called “special museum events”. This way of using museum spaces became an important source of museum income. Authors consider the special event the one that not only happens inside the museum, but also uses intellectual resources of museum staff members, involves them into creation of new museum products together with performing artists, designers and other creative professionals [Gordin, Dedova, Khoreva, 2014, p. 76].

According to theorists and practitioners of museum activity, the term “event” may be used to describe guided tours, lectures, museum lessons, workshops, contests, games, holidays, festivals, performances of museum theater, balls, academic competitions, etc. It is necessary to talk about such event as “the Night of Museums” separately. It is a global cultural event, but also a mechanism that motivates museums to organize events and create new projects. A great number of special events take place during “the Night of Museums”, attracting new audience to museums [Schaller, Harvey, Elsweiler, 2012].

In the article “Superstar Museums: An Economic Analysis” Bruno S. Frey studies “superstar museums” and particularly instruments they use to maintain their status and deal with competition – other museums (Frey, 1998). To keep ahead of the competition world famous museums offer “full experience” to their visitors. This means that they function not only as museums, amusement parks with cafes, gift shops and restaurants, but also go beyond that. The author provides an example of the Louvre Museum that serves as a venue for symposiums, conferences, product presentations, fashion shows and other events. Educational and entertainment events for adults are also mentioned, one of them is screening of films about Van Gogh in his art gallery.
Very few researchers study museum events in particular. Hassanien and Dale in their article “Toward a typology of events venues” examine events in general and their classification (Hassanien, Dale, 2011). Famous American researcher, Professor Donald Getz, identified particular features of special events in museums. In his opinion, such events are characterized by their rarity and difference from daily activities (Getz, 1997).

After examining international and Russian literature on museum activity, we concluded that the main goals of museum event activities are as follows:

1. Attraction of new visitors
2. Establishing deeper relationships with visitors
3. Customer satisfaction by providing “full experience”
4. Overcoming barriers for visiting the museum
5. Increase of museum income
6. Advertising and promotion of museum
7. Improving the efficiency of museum activity.

Additionally, by event organizing museums have an opportunity to design visitor experience, engaging them into activities where they act not as passive spectators, but receive stimuli unusual for them. That makes their visit unique and unforgettable (Kotler, 2000).

There is an uncertainty among museum practitioners in the definition and distinguishing different forms of museum activity. Describing a museum event, museum staff members may call it “special program”, “event” or “project”. This happens because the boundary between terms “event” and “special program” is rather unclear.

There is also no established definition for the term “special museum program” in academic literature. In the meantime, people working in museum industry constantly use it (with several variations). It was found after the analysis of major museums in Russia and abroad.

For instance, the words “events” and “programs” are used as synonyms on the website of The Metropolitan Museum of Art (http://www.metmuseum.org/) and we can find examples of museum activities in “events” section and choosing “programs” from the list. It contains both events and programs. On the website of the Museum of Modern Art (MoMA) (http://www.moma.org/) the activities in question are listed in “learn” section, where we can choose different target audience and events (Lectures & Events; Classes & Internships; Group Visits; Kids & Families; Teens; K–12 Teachers; Community Organizations; Visitors with Disabilities). Website of the Natural History Museum in London (http://www.nhm.ac.uk/) has similar structure. Inside these subcategories, the most frequent word that is used in context that we study is the word “program”. It is interesting to note that in master’s theses based on the internship in some American museum, the word “programming” is used for any cultural and educational activity regardless of its format. There were no clear distinction between museum events and programs found on museums’ websites or in the literature. Therefore, we will provide the definition for both terms.

Special museum program is a unique system of working with visitors in the museum organized and implemented by museum’s staff (with possible involvement of certain
professionals such as psychologists, social workers, etc.), that goes beyond daily museum activities, but related to it thematically.

Special museum programs are designed based on the potential target audience, technical and creative capacities of the museum, and combine traditional expository methods and innovative ways of presenting the material. For example, Henry Ford Museum in Greenfield Village implemented an assistance program for students who are at-risk group. The program included career guidance, participation in community service and provided supervisor for each student. The results were astonishing: the students’ attendance had improved, and the average score had increased by 70%.

The principal goal of the Wing Luke Museum of the Asian Pacific American Experience in Seattle is preservation of historical and cultural heritage of Chinatown, where it is located, by involving the local community. The locals work in the museum as curators and share stories of their life with other visitors. Because of this program, residents of the area had acquired a feeling of belonging to their neighborhood and a sense of responsibility. In a number of New York museums (MoMA, Metropolitan, and Studio Museum in Harlem) there are special programs for people with Alzheimer’s disease and other cognitive disorders. The purpose of these programs is to improve the quality of life of these patients.

Eric A. Jensen in his article “Reconsidering the Love of Art: Evaluating the Potential of Art Museum Outreach” describes a special program designed by Fitzwilliam Art Museum for young mothers with small children at risk. The program aims to raise these mothers’ interest in art.

The following table represents the main parameters for distinguishing special museum programs from other forms of museum activity such as exhibitions and events (see, Table 1).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exhibitions</th>
<th>Events</th>
<th>Special museum programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Functional orientation</td>
<td>Object</td>
<td>Subject</td>
<td>Subject</td>
</tr>
<tr>
<td>2. Innovative methods</td>
<td>Only technical innovations</td>
<td>Innovations in methods and forms of presentation</td>
<td>Innovations in methods and forms of presentation</td>
</tr>
<tr>
<td>3. Goal setting period</td>
<td>Short-term</td>
<td>Short-term</td>
<td>Long-term</td>
</tr>
<tr>
<td>4. Overcoming barriers for attendance</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Organizer</td>
<td>Museum and / or partner</td>
<td>Museum and / or partner</td>
<td>Museum</td>
</tr>
<tr>
<td>6. Financial resources</td>
<td>Museum and / or partner</td>
<td>Museum and / or partner</td>
<td>Museum</td>
</tr>
<tr>
<td>7. Homogeneity of the target audience</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Work with tourists</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
</tr>
<tr>
<td>9. Engaging external professionals</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: prepared by the author.
Special museum programs have common features with both events and exhibitions. The key difference is that unlike the other two areas of museum activity, special museum programs have long-term goals, they are organized and funded directly by the museum. Another important difference is that special museum programs aim to work with local people, not with tourists.

Based on the analyzed sources we can match the directions of special museum programs and functions realized through them.

**Table 2.** Implementation of social functions of the museum through special museum programs

<table>
<thead>
<tr>
<th>Function</th>
<th>Directions and features of programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Education</td>
<td>Creative, educational and professional thematic programs for children and adults</td>
</tr>
<tr>
<td>2 Organization of free time</td>
<td>Evening and weekend programs</td>
</tr>
<tr>
<td>3 Socialization</td>
<td>Programs for people with special needs, the elderly and people at risk</td>
</tr>
<tr>
<td>4 Museum as agent of social change</td>
<td>Programs that have global social goals, such as preservation of the local area or neighborhood. Programs dedicated to tolerance, programs for elderly people, etc.</td>
</tr>
</tbody>
</table>

*Source: prepared by the author.*

Despite the growing popularity of new formats of activities, not all Russian museums implement them; St. Petersburg museums are not an exception. During the research conducted in 2013 and aimed at identifying the principal common characteristics of special museum programs, information was collected from 44 sites of medium and small museums of St. Petersburg, located in the city. Furthermore, 34 interviews with employees of these institutions were conducted.

After analyzing the survey results, we concluded that special museum programs have not yet become one of the priorities of St. Petersburg museums. Eighteen museums out of 44 that were analyzed have special museum programs. The main types of programs are programs that implement educational and pedagogic function, aimed at children, schoolchildren and family audiences (14 out of 18 museums have such programs). The second most common function is organization of free time through special programs (eight museums have evening and weekends programs).

Among the main reasons preventing the development of this area of museum activity, respondents mention the limited space of the museum, limitations of managing organizations and conservatism of museum employees.

The following main trends in the development of special museum programs offered by the St. Petersburg museums can be distinguished:

The synthetic nature of the program that allows to use elements of game, creativity and interaction with exhibit items. The program uses synthesis of the arts (for example, concerts in the museum, theatrical performances, etc.), as well as various game formats (quests, games with exhibit items).
Special programs are more focused on the family audience and children under 18. Adults without families, senior citizens, people with disabilities, and people at risk are almost not involved at all.

Educational function and organization of free time function are more implemented through special museum programs, than a function of socialization or function of museum as agent of social change. The vast majority of all implemented special programs aims precisely at increasing the level of education among the population. The museum is still the organization perceived as high culture institution that transmits knowledge to the society. However, we can observe considerable flexibility regarding the operating hours of museums. There are weekend and evening programs that makes museum more accessible to potential visitors. Nevertheless, the access to culture through museums is almost impossible for people with special needs, senior citizens, and people at risk. Only two out of 44 museum that were studied implement socialization programs for vulnerable groups.

In general, the existing museum programs are similar. They utilize the same methods and forms of interaction with the audience. In addition, most programs are not series of meetings, but one time guided tours on a certain topic with interactive elements that are repeated from time to time for different audience. All these features create a sense of limitation of museum program activities. St. Petersburg museums are still mostly implement object-oriented functions, namely they organize exhibitions, excursions, and conduct scientific research. It is also necessary to note that the city’s museums are not sufficiently take social responsibility and implement few programs with more global goals, apart from education and goals of the museum itself, related to the promotion and attraction of visitors.

Conclusion

The social component is becoming one of the formative in museums activity planning. Expectations of both visitors and the government concerning museum activity are growing. Special museum programs is one of the modern, rapidly developing areas of museum activity, which can respond to the demands of the society. Both foreign and Russian literature describe various examples of the implementation of such programs and the impact they have. Literature analysis showed that museums around the world today are not only the collection of exhibit items and scientific institutions, but also “teachers”, organizers of free time, agents of social change and socialization. However, a closer look shows that St. Petersburg museums have not yet reached the level of museums abroad, such as the US museums. Currently only a narrow circle of St. Petersburg museums conducts program activities. A deeper study of the causes of the current situation and search of the possible ways to change it, in our opinion, is a topic for further research in this area.
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The purpose of this study is to determine the essence and characteristics of the impact of organizational structure, especially its shape (measured in terms of five dimensions: configuration, centralization, specialization, formalization and standardization), on the inter-organizational, cooperative relationships (measured by the level of beneficialness of those relationships). The scope of the theoretical part of this paper spans from inter-organizational relationships, their types, their embeddedness in business networks, through the phenomenon of extending of organizational structures beyond their organizational limits and indication of features of organizational structures that allow to develop cooperative relations up to the features of structures that allow to exploit dynamic capabilities. In the part devoted to the empirical research results the impact of organizational structures on cooperative relationships is identified and interpreted.

Key words: organizational structures, dimensions of organizational structure, cooperative relationships, inter-organizational relations, beneficialness,

1. Introduction

In today’s economic conditions, beneficially shaped inter-organizational cooperative relationships allow enterprises to gain competitive advantage. The significance of cooperative relationship manifests itself in the concept of relational capital, which can be ascribed to the excess value of the company when its estimate by classical methods of valuation, both accounting and financial, does not coincide with objectively perceived total value. It is assumed that the relationships of the organization with elements of the
task environment (in particular relations with cooperators) have at its base voluntaristic character, so they can be shaped by individual organizations. It was assumed that the influence of the shape of the organizational structures of the relationships’ participant on cooperative relations exists, and consequently that the potential benefits that are associated with it appear.

2. Cooperative relationships in business network

Relational resources are of particular importance for the organizations’ activities. Their sources are various inter-organizational activities [Wojcik-Karpacz 2012, p. 22]. Relationships that make up these resources occur between an organization and external parties, in which they assume the positions of equivalent cooperators. These entities are, as a rule, suppliers, customers and competitors, i.e. the elements of the task environment. The term of relationships of organization with the environment, particularly with the elements of the task environment, may refer to two types of ties. Firstly, these ties may be interactive in nature, so they may rely on exchange of resources and information. Secondly, the relationships may be non-interactive, so the organizations may share certain common characteristics, e.g. cognitive and value systems [Porac, Ventresca, Mishina 2002] or, sourcing from isomorphism, identity and strategy [Dyer, Nobeoka 2000]. The vast majority of studies refers to the interactive relationships, hence in the further course of work, the focus will be primarily put on the interactive relationships. Relations with the environment are relatively durable transactions, flows of resources and connections different kind occurring between the organization and at least one element of its environment [Oliver 1990]. These ties are often very complex and interdependencies can be one of the key success factors. On the basis of the resource-based view, the individual relationships are a part of particular type of resource – namely the already mentioned relational capital. The inter-organizational relationships are a special type of relationships with the environment, which can be described as the result of a process in which at least two organizations had formed strong relationships and extended its social structures and the economic and technological services in order to reduce costs or increase the value of the organization and, consequently, in order to obtain mutual benefits [Anderson, Narus 1991].

Relationships as a resource of the organization are associated with obtaining the benefits and incurring the costs associated with these relationships. According to W. Czakon [2006] entities that act as parties within relationships derive benefits from them that can be equated to the access to the tangible resources, e.g. production capacity or financial resources, and intangible assets, e.g. alliances and agreements, expertise, know-how, skills and competences of its partners in relationships. Relations between cooperating entities have a special significance for them because of their importance for the long-term success. Relationships with co-operators, in the classical perspective, are vertical in nature, which means that they exist along the inter-organizational value-
added chain. These are mainly bonds between the company and its suppliers, including subcontractors and customers. In the last few decades, especially in the sectors of new technologies, the relationships between economic operators that are horizontal in terms of dimension became more important than ever [Okada 2008]. Examples of this type of relationship primarily include various forms of long-term cooperation in the form of joint ventures and strategic alliances, as well as other forms of short and long-lasting cooperation.

Relationships between companies can be analyzed on different levels and from multiple perspectives. C. Lane and R. Bachmann proposed the analysis of the relationship at three levels – interpersonal, organizational and institutional [Lane, Bachmann 1997]. The core of the relationship may be interpersonal contacts, formal contracts or membership to organizations that bring together entities acting in a sector in case of institutional relationships.

Relationships based on contracts have the greatest significance for organizations, because the formal agreement is the basic instrument governing business transactions. Agreements tying cooperators can be selected by criterion of the area to which the agreement relates. This way, there can be distinguished: development, purchasing, production, marketing and distribution agreements [Urban, Vendemini 1992, p. 131]. As a measure of cooperators’ interconnection a range of fields that are regulated by an agreement can be assumed. The relationships are usually created by the manifestation of the unanimous will of the partners on the basis of the freedom of contracts principle. Among the contractual relationships there can be distinguished arm’s length contractual relations (market relations), which predominate in the economies of Western countries and obligatory contractual relations, which predominate in the economies of the Far East. The criteria for differentiating these two types of relationships are interdependence and time span for reciprocity [Sako 1992, p. 4].

Taking into account the above considerations regarding definitions of variously conceived relationships a definition may be proposed, according to which the cooperative relationship is a vertical or horizontal tie between the cooperating parties (i.e. the organization and its suppliers, customers and cooperating competitors), maintaining a repeatable flow of tangible and intangible resources in order to achieve mutual benefits.

According to M. Ebers [1997] inter-organizational networks can be defined as links that establish recurring, partner-oriented relations based on the exchange for a certain (often determined by the moment a common goal or will to terminate the relationship because of other reason) or an unspecified amount of time between a finite number of business actors. These actors maintain individual control over their resources, but in some cases they carry out negotiations or co-decide about their use. This way, networks are different from the market, in which one-sided coordination of plans and actions is preferred. In addition, in networks the business participants communicate with each other sharing a wider range of information than in case of separate exchanges.
of resources carried out in market conditions. On the other hand, inter-organizational networks differ from the hierarchy by the fact that their participants do not create a new economic entity and therefore they maintain unilateral control over their own resources. B.R. Barringer, J.S. Harrison [2000, p. 387] presented the idea that inter-organizational networks are the constellations of companies organized more often on the basis of social contracts rather than legally binding agreements. According to the authors of this concept networks are distinct from various other forms of interaction way of resources allocation. However, it should be noted, that in networks, there are various forms of cooperation among its participants, hence it can be concluded that the relation between the network and different types of cooperation partners (cooperative relationships) is analogous to the relation between the entirety and its part.

**Figure 1. Levels of business activity analysis**

![Figure 1](image)


T. Ritter, I.F. Wilkinson and WJ Johnston [2004, p. 179] introduced a clear distinction between the concepts of inter-organizational relationships and business networks. The authors presented five levels of activity (Fig. 1) form the level of independent actions of individual participants (actors) to complex networks occurring between them. Independent actors conduct business activities without entering into relationships with other entities. Bilateral relations (dyad) are relationships existing between two different actors. Portfolio of relationships is a level in which the actors are tied to a single relationship with a larger number of participants. The level of connected relations presents the configuration of links between the given actor and relationships, in which the participants of the given actor’s portfolio of relationships are tied. At the level of business
networks relationships existing between any elements of the population are a subject of the analysis. As can be seen, the primary subject of analysis concerning inter-organizational ties are bilateral relationships between entities that constitute a building material of the inter-organizational networks.

Y.L. Doz and G. Hamel [1998, p. 246] introduced a similar division of relationships, focusing on alliances. They singled out: 1) an independent competitor, 2) information networks, 3) multilateral alliances and 4) competitive business coalitions.

A proposal of gap exploitation in the spectrum between the market and the hierarchy was presented by E. Urbanowska-Sojkin [2003, p. 126] who distinguished twelve kinds of cooperative relationships between enterprises, arranging them in order from the lowest to the highest level of cooperation: trade, exchange of information, research and development aid, technical assistance, leasing, co-production, franchising, consortium, joint venture, acquisition and merger. This concept does not include the construct of inter-organizational networks as a separate category. On one hand it may be caused by its elusive nature and on the other hand by a high degree of flexibility – after all, the elements of inter-organizational networks are both joint-ventures and research and development aid. E. Urbanowska-Sojkin therefore presents different kinds of relations which are elements of the inter-organizational networks.

D. Latusek-Jurczak [2014] presented the division of forms of cooperation with cooperators based on two criteria. According to her concept the first criterion is a type of coordination mechanisms of relationships and as the other criterion she chose motivation of entering into relationships, including the benefits of standardization, the benefits of diversity and the joint acquisition of knowledge. Nevertheless, this is not a comprehensive catalog of motives of initiating the inter-organizational cooperation.

Simple trade relations have their foundation in ordinary civil law contracts, which specify the principles of cooperation and authority of each party [Stafford 1994, p. 64] manifested as greater rights provided for a given part. In a situation governed by simple trade agreements, the conditions are close to ideal market situation, the basic parameters of the relationship are defined by the parties (e.g. price, quantity, quality), and other aspects are regulated by the legislation of the concerned country. Actions performed within the relationship are limited to the constraints of these parameters. As a rule, contract law presumes equality of the parties, but it often provides an increased level of protection for the party that receives a non-cash benefit in exchange e.g. through a variety of warranty services, insurances and guaranties. T. Roxenhall and P. Ghauri [2004] argue that formal contracts are losing in importance as more and more actors interact regardless of formal agreements and often they even do not enter into them in a formal way. Contracts concluded in order to create more sophisticated relationships, e.g. sustainable alliances and joint ventures, need both the higher level of formalization and the introduction of a greater number of modifications to the statutory regulations.
3. **The organizational structure as a factor in the process of shaping of cooperative relationships**

Modern organizations in order to accomplish their goals and implement and realize their strategies have to design organizational structures that allow to achieve the highest degree of success of the organization. This conviction about the organizational structure as a derivative of strategy was formulated by A.D. Chandler at the beginning of the second half of the last century, who pointed out that the organizational structure of the company should be at least appropriately fitted to the implemented strategy, and it even should it be based on the strategy [Chandler 1962, p. 15]. D.J. Hall and M.A. Saias [1980] pointed at a higher level of complexity and the different directions of the relations between strategy and structure, as well as other factors affecting the shape of organizational structures. However, it can be assumed that the strategy of the organization acts as a key factor in shaping the organizational structure that basically has a functional role for implementation of strategy – the structure is expected to allow realization of the objectives of the organization to the fullest extent of organizational potential. Implementation of complex, modern strategies requires cooperative relationships because of the potential synergies, opportunities to secure rare and valuable resources, reduction of operating costs and reduction of the uncertainty associated with business activity. On the other hand, maintaining beneficial relations with cooperators, as a sole value, can be a part of the goals system of the organization. Taking the above into consideration, you can point to the first source of the connection between the shaping of the organizational structure and shaping of cooperative relationships. A different kind of connection between the two constructs can be identified taking into account the previously cited observation made by J.C. Anderson and J. A. Narusa [1991]. The authors pointed out the special role of organizational structures in the development of cooperative relationships – in the process, which forges the relationships, the extension of the economic, social and technological structures takes place. The structures understood this way are in fact primarily composed of organizational structures and operational processes with all their elements. It can be concluded that the extended organizational structures are the organizational base of shaped relationships. However, these structures are not limited to the positions and worksites in organizations as parts to a relationship, but they also include instruments used in their communication, systems of integration and coordination of activities of their employees. The extension of these structures is associated with the process of their integration, indication of the centers of power, decision-making powers placement and determination of the competences of the individual co-workers. The influence of the shape of organizational structures on the shape of cooperative relations is the subject of this study, regardless of the nature of this influence.

The shape of the organizational structure can be presented using a description of its characteristics. Such a proposal of synthetic characterization of organizational
structures was presented by D.S. Pugh, D.J. Hickson, C.R. Hinings and C. Turner [1968], who proposed five dimensions of structural analysis: 1) configuration, 2) specialization, 3) centralization, 4) formalization and 5) standardization. The authors regarded the configuration of organizational structure as its „shape“. Specialization was defined by the authors as the division of labor in the organization and allocation of responsibilities in the workplace. Centralization is understood as a deployment of decision-making powers related to the activities of the organization. Formalization indicates the extent to which rules, regulations, procedures, instructions and communication are conveyed in writing or form of a document. By standardization the authors understand the degree of orderliness of repetitive procedures. In the literature one can identify many research efforts aimed to identify the connection between the shape of the organizational structure and the variously manifesting inter-organizational relationships or their specific components.

M.P. Nunes [2016] presented an analysis of organizational structures found in companies that are parties to relationships based on the global sourcing concept (international relationships with suppliers). The author indicated that the surveyed companies tended to implement structures with a high level of centralization. Referring to the formalization of the structure the author pointed out that the test subjects exhibited both a low and a high level of formalization – she found no significant links in this area. However, the author defined the formalization differently from the accepted canon – according to her the formalization is associated in particular with the supervision and control, and standardization of processes.

Research on the effect of the shape of the organizational structure of production companies on the shaping of their relationships with suppliers and customers in the light of integration with these cooperators was carried out by X Koufterosa, X. Peng, Lu G. and R. Peters [2014]. The authors proposed an analysis of the impact of the following features on integration with partners in the value chain: 1) centralization, which was expressed in two categories: microcentralization – understood as centralization of production plants, macrocentralization – centralization occurring at the corporate level, 2) formalization, 3) complexity of the organizational structure, expressed as horizontal (identified as horizontal specialization) and vertical (identified by the hierarchical levels of management) variation occurring through the organizational structure [Hall 1999]. The authors had assumed a negative impact microcentralization, a positive impact macrocentralization, a negative impact of formalization and a positive impact on the complexity of integration with suppliers and customers. The results of those studies did not confirm the expectations of the authors – they were able to show only a positive impact on the formalization on integration with suppliers and customers and a negative impact of microcentralization on integration with customers.

A similar study relating to the impact of these factors on the shaping of relationships with customers expressed by the level of market orientation was conducted by T.
Cabello, A. Revilla and M. Vega [2016]. These authors concluded that there is a positive impact of formalization and a negative impact of centralization on the level of market orientation, while they found no correlation between the level of complexity and the level of market orientation. Their findings are consistent with the results presented by X. Koufterosa, X. Peng, Lu G. and R. Peters [2014].

The literature also indicates guidance on the organizational structure, which indirectly refers to the previously presented dimensions of the organizational structure that allow the shaping of cooperative relationships. The process of shaping cooperative relations, as a way of acquiring and integrating resources remaining in the environment of the organization in order to continuously stay in compliance with the environment, can be considered as one of the dynamic capabilities on the ground of most widely-cited views [cf. Teece, Pisano, Shuen 1997; Blyler, Coff 2003; Agarwal, Helfat 2009]. T. Felin and T.C. Powell [2016] pointed out two features which are essential to build the optimum structure for the use of dynamic capabilities: 1) variation and 2) integration. The variation in this case is understood as specialization, which can manifest itself in specifically identified areas of activities of autonomous organizational units deposited on the border of the organization. Integration in this case is related to the extent to which the organization implements processes enabling fusion of dispersed knowledge. On the other hand, D. Teece, M. Peteraf and S. Leih [2016] refer to the organizational agility that allows the use of dynamic capacity correctly. Organizational agility is reflected in the area of organizational structures as their flexibility and the ability to adapt quickly. As indicated by A. Zakrzewska-Bielawska [2014] flexible organizational structures should be characterized by a high degree of decentralization, narrow specialization, low level of standardization and limited to a minimum level of formalization.

Observations cited above allow to conclude that the issue of the effect of shape of the organizational structure on the shaping of cooperative relations is a valid and cognitively interesting scientific subject.

4. Impact of the shape of the organizational structures on beneficialness of the shape of cooperative relations – presentation of research results

In order to identify links between the shape of organizational structures and the shape of cooperative relations it was decided to make a set of assumptions relating to the measures used in the research. The shape of organizational structure was measured by a reference to the dominant type of organizational structure implemented in the organization (configuration) and by an indication of the level of the four dimensions – centralization, specialization, formalization and standardization. The shape of the relationship, due to the equifinal nature of the shaping process, was measured by the indication of the level of beneficialness of the shaped cooperative relationships. In this case, beneficialness is defined as the difference between
the effects obtained from a relationship and costs associated with it. This definition of the term of “beneficialness” is synonymous with the term „value“ adopted by E. Piwoni-Krzeszowska [2014, p. 65], although the concept of „value“ may be treated as a term describing more complex designations than “beneficialness” that could pass as a component of value.

The study was conducted at the beginning of the 2016 on a sample of 97 Polish companies, i.e. companies that are established in the Republic of Poland. The questionnaire was sent to 493 companies and 114 responses were received. In the process of verifying the consistency of the responses 17 of them were rejected due to defects.

The first element of the assumed procedure was an analysis of the links between the configuration of the organizational structure and the shape of cooperative relationships. The table presented below shows the values of chi-square tests of independence made on contingency tables between an indication of the dominant type of organizational structure and the beneficialness of the shape of cooperative relationships with different types of suppliers.

**Table 1.** Summary of the chi-square tests of independence and p-values indicating the strength and significance of the links between the indication of the dominant type of organizational structure and the beneficialness of the shape of cooperative relations of the surveyed companies

<table>
<thead>
<tr>
<th>Dominant type of organizational structure</th>
<th>Beneficialness of the shape of cooperative relationships with suppliers</th>
<th>Beneficialness of the shape of cooperative relationships with customers</th>
<th>Beneficialness of the shape of cooperative relationships with competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,96 (0,9366)</td>
<td>5,12 (0,2756)</td>
<td>3,39 (0,9074)</td>
</tr>
</tbody>
</table>

*Note: statistically significant chi-square tests of independence (at the standard significance level of 0.05) are highlighted by bold font and asterisks*

*Source: own study based on empirical research*

Analyzing the data contained in Table 1, it should be noted that the dominant type of organizational structure has no effect on the beneficialness of the shape of cooperative relationships of Polish companies. The lack of relationships in this area may be associated with popular usage of traditional functional structures that have been implemented in most of the enterprises, without significant differences between the companies with beneficially and unbeneficially shaped cooperative relationships.

Subsequently, an analysis of links between the other four dimensions of organizational structure (centralization of decision-making powers, specialization of tasks, formalization of the organizational structure and standardization of procedures) and the level of beneficialness of the shape of cooperative relations with different types of cooperators the analysis of chi-square independence test on contingency tables and Spearman's rank correlation coefficients were assumed. Summary of test values and coefficients are presented in Table 2.
Table 2. Summary of the chi-square tests of independence and Spearman’s correlation coefficients between the level of centralization, specialization, formalization and standardization and the level of beneficialness of the shape of cooperative relationships of the surveyed companies

<table>
<thead>
<tr>
<th></th>
<th>beneficialness of the shape of cooperative relationships with suppliers</th>
<th>customers</th>
<th>competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spearman’s rho</td>
<td>chi-square</td>
<td>Spearman’s rho</td>
</tr>
<tr>
<td>centralization</td>
<td>9.24 (0.9922)</td>
<td>+0.0314 (0.6276)</td>
<td>3.32 (0.8457)</td>
</tr>
<tr>
<td>specialization</td>
<td>19.41* (0.0128)</td>
<td>+0.1059 (0.3019)</td>
<td>5.53 (0.2373)</td>
</tr>
<tr>
<td>formalization</td>
<td>5.32 (0.9723)</td>
<td>+0.0474 (0.6449)</td>
<td>11.47* (0.0217)</td>
</tr>
<tr>
<td>standardization</td>
<td>5.82 (0.6670)</td>
<td>+0.0008 (0.9940)</td>
<td>3.74 (0.4419)</td>
</tr>
</tbody>
</table>

Note: statistically significant chi-square tests of independence and Spearman’s rho coefficients (at the standard significance level of 0.05) are highlighted by bold font and asterisks.

Source: own study based on empirical research

Analyzing the values of chi-square independence tests summarized in Table 2, it has to be noted that only two of the four dimensions exhibit an impact on the beneficialness of the shape of cooperative relationships. The level of specialization affects beneficialness of relationships with suppliers and competitors, and the level of formalization beneficialness of cooperative relationships with customers. Analyzing the Spearman’s rank correlation coefficients, it should be noted that a general pattern can be identified – with increasing levels of centralization, specialization, formalization and standardization increases the level of the beneficialness of the shape of cooperative relations of the surveyed companies. The only exception is the impact on the level of centralization on beneficialness of cooperative relationships with customers, which is a negative. Given the significance listed in the table of coefficients it should be noted that only one of the previously identified dependencies has been confirmed by the analysis of Spearman’s correlation coefficients – the relationship between the level of specialization and the beneficialness of the shape of cooperative relationships with competitors.

The high level of specialization allows to increase employee productivity and allocation efficiency of resources obtained from the suppliers. It also provides a division of competences that allow for a smooth transfer of finished products and services to customers. In consequence this situation affects the beneficialness of the shape of cooperative relationships with these types of cooperators. The high level of formalization limits competence conflicts and wrong decisions, increases the predictability of the activities undertaken in the organization and contributes to consolidation of workers’ experiences, allowing to better meet the needs of customers, consequently increasing the level of the beneficialness of cooperative relationships with them.
5. Summary and conclusions

In the light of the results of the conducted research it can be stated that they are consistent with the results of previously conducted studies relating to the dimensions of the organizational structure and its impact on various aspects of the shape of cooperative relationships, especially in the area of formalization. Considering the impact of its level only its effect on the beneficialness of the shape of cooperative relationships with customers was confirmed, and there was no effect on relationships with suppliers, contrarily to the suggestions drew out by the results of the research conducted by X. Koufterosa, X. Peng, G. Lu and R. Peters [2014] and the results of the analysis by T. Cabello, A. Revilla and M. Vega [2016]. The negative impact of centralization on the shape of cooperative relationships was not confirmed, however it should be noted that the centralization of all of the dimensions was, although not statistically significant, negatively correlated with the level of the beneficialness of the shape of cooperative relationships, but only with customers. It should also be noted that the conducted studies indicate a positive impact of the level of specialization on beneficialness of the shape of cooperative relationships with suppliers and competitors in the context of coopetitive relationships, which confirms the suggestions made by T. Felina and T.C. Powell [2016], and D. Teece, M. Peteraf and S. Leih [2016] concerning the organizational structure allowing for the use of dynamic capability.

The results indicate a low level of identified dependencies, which leads to the conclusion that it is necessary to conduct deeper, more detailed studies on the impact of the organizational structures of the cooperating companies on the shape of cooperative relationships, including their structure. Subsequently, the impact of other elements of the organization, which are extended and integrated during the initiation of cooperative relationships – communication systems, incentive systems and social systems – should be further analyzed.

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The article describes the niche in transport of goods in Poland. The dominant share in transport in Poland as described by mode of transport belonging to road and railways followed by air, inland waterway and maritime transport. The air, inland waterway and maritime transport although smaller still play important roles in the transport of specific types of goods. This article is based primarily on data from the 2005–2015 years. However, while describing the background of structural changes in transport niche, earlier information was used i.e. since 1970. The data for each of all the modes of transport was presented in tabular and graphic charts.

Transport of goods in Poland

Transport of goods is closely connected with the need for spatial movement of resources. There is a strong relationship between the economy in general and the means of transport: transport development determines the development of the economy and vice versa, the economic development determines the growing of transport. In the last of ten years we have seen a growth of both the economy and the development of transport (Picture1). The period of strong growth encompassing of all main sectors (i.e. services, industry and constructions) was launched in 2004 and was associated to the Polish accession to the European Union. In the second half of 2008, the Polish economy began to feel the negative effects of the global economic crisis. Although the global economic crisis decreased the rate of growth of GDP, Poland as the only one of EU economies remained on the growth path in 2009. In 2010 the economic recovery of the Polish main trading partners allowed to increase trade furthermore, and thus it resulted in increased demand for transport of goods. The largest volume of goods transport in Poland was observed in 2011 (Picture 2) – 1,935,149 thousand tones. In 2013, there was a slow increase in business activity after the stagnation in 2012. The year 2014 saw positive trends in the economy. There was a definite improvement in domestic demand, which
was the result of increased consumption and investment recovery. This trend continued in 2015\(^1\).

**Picture 1.** GDP in millions and total transport in thousands of tones

![Graph showing GDP and total transport](image1)


**Picture 2.** Total transport of goods in Poland in 2005–2015 (in thousands of tones)

![Bar chart showing total transport](image2)


The majority of goods transported in Poland were by road transport – more than 83%, and the share of road of transport in the total transport of goods continued to grow. The second largest means of transport was the railway transport (12% share), its importance was declining in favor of road transport. Third place was occupied by pipeline transport (3% share). The transport niche in the transport of goods in Poland are: air transport, inland waterway transport and maritime transport. All these three types of transport were only 1% of total transport of goods (Table 1).

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\(^1\) Ministerstwo Gospodarki, Polska 2014, Raport o stanie gospodarki, Warszawa 2014, s.89.  
Ministerstwo Gospodarki, Polska 2015, Raport o stanie gospodarki, Warszawa 2015, s.99.

Table 1. Structure of transport of goods by mode of transport in Poland in 2005–2015 (in %)

<table>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway transport</td>
<td>18,9</td>
<td>19,7</td>
<td>16,0</td>
<td>15,0</td>
<td>11,9</td>
<td>11,8</td>
<td>13,0</td>
<td>12,5</td>
<td>12,6</td>
<td>12,4</td>
<td>12,4</td>
</tr>
<tr>
<td>Road transport</td>
<td>75,9</td>
<td>75,2</td>
<td>79,2</td>
<td>80,9</td>
<td>84,3</td>
<td>84,4</td>
<td>83,5</td>
<td>84,0</td>
<td>84,1</td>
<td>83,5</td>
<td></td>
</tr>
<tr>
<td>Air transport</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
</tr>
<tr>
<td>Pipeline transport</td>
<td>3,8</td>
<td>3,8</td>
<td>3,4</td>
<td>3,0</td>
<td>3,1</td>
<td>2,8</td>
<td>2,9</td>
<td>2,7</td>
<td>2,7</td>
<td>3,0</td>
<td></td>
</tr>
<tr>
<td>Inland waterway transport</td>
<td>0,7</td>
<td>0,6</td>
<td>0,6</td>
<td>0,5</td>
<td>0,3</td>
<td>0,3</td>
<td>0,3</td>
<td>0,2</td>
<td>0,3</td>
<td>0,4</td>
<td>0,7</td>
</tr>
<tr>
<td>Maritime transport</td>
<td>0,7</td>
<td>0,7</td>
<td>0,8</td>
<td>0,6</td>
<td>0,5</td>
<td>0,4</td>
<td>0,4</td>
<td>0,4</td>
<td>0,4</td>
<td>0,4</td>
<td>0,4</td>
</tr>
</tbody>
</table>


In 2015, 1,824,185 thousand tons of goods were transported and it was about 401,511 thousand tones more than in 2005 (an increase of 22%). Table 2 presents data on transport of goods by mode of transport in thousand tones in 2005–2015. In the analyzed period, the volume of goods transported was closely linked with the economic situation both in Poland and in its main trading partners. A significant increase in the volume of transported goods occurred in 2010, since then it had remained on a fairly constant level of 1,850,000 thousand tones.

Table 2. Transport of goods by mode of transport in Poland in 2005–2015, thousand tones

<table>
<thead>
<tr>
<th></th>
<th>Railway transport</th>
<th>Road transport</th>
<th>Air transport</th>
<th>Pipeline transport</th>
<th>Inland waterway transport</th>
<th>Maritime transport</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>269 553</td>
<td>1 079 761</td>
<td>34</td>
<td>54 257</td>
<td>9 607</td>
<td>9 362</td>
<td>1 422 574</td>
</tr>
<tr>
<td>2006</td>
<td>291 420</td>
<td>1 113 880</td>
<td>36</td>
<td>55 631</td>
<td>9 271</td>
<td>10 021</td>
<td>1 480 259</td>
</tr>
<tr>
<td>2007</td>
<td>245 346</td>
<td>1 213 246</td>
<td>46</td>
<td>52 866</td>
<td>9 792</td>
<td>11 432</td>
<td>1 532 728</td>
</tr>
<tr>
<td>2008</td>
<td>248 860</td>
<td>1 339 473</td>
<td>47</td>
<td>49 029</td>
<td>8 109</td>
<td>10 447</td>
<td>1 655 965</td>
</tr>
<tr>
<td>2009</td>
<td>200 820</td>
<td>1 424 883</td>
<td>37</td>
<td>50 242</td>
<td>5 655</td>
<td>9 378</td>
<td>1 691 015</td>
</tr>
<tr>
<td>2010</td>
<td>216 899</td>
<td>1 551 841</td>
<td>41</td>
<td>56 208</td>
<td>5 141</td>
<td>8 362</td>
<td>1 838 492</td>
</tr>
<tr>
<td>2011</td>
<td>271 577</td>
<td>1 596 209</td>
<td>45</td>
<td>54 488</td>
<td>5 093</td>
<td>7 373</td>
<td>1 935 149</td>
</tr>
<tr>
<td>2012</td>
<td>241 015</td>
<td>1 548 111</td>
<td>41</td>
<td>52 985</td>
<td>4 579</td>
<td>7 476</td>
<td>1 854 207</td>
</tr>
<tr>
<td>2013</td>
<td>245 529</td>
<td>1 553 050</td>
<td>37</td>
<td>50 656</td>
<td>5 044</td>
<td>6 965</td>
<td>1 861 281</td>
</tr>
<tr>
<td>2014</td>
<td>246 166</td>
<td>1 547 883</td>
<td>38</td>
<td>49 810</td>
<td>7 629</td>
<td>6 781</td>
<td>1 858 307</td>
</tr>
<tr>
<td>2015</td>
<td>244 687</td>
<td>1 505 719</td>
<td>38</td>
<td>54 850</td>
<td>11 928</td>
<td>6 963</td>
<td>1 824 185</td>
</tr>
</tbody>
</table>

Inland waterway transport

A modern inland waterway ship can replace approx. 150 trucks which translates to 3,000 tons of goods\(^2\). Furthermore, compared with other means of transport inland waterway is characterized by a relatively low fuel consumption. 1 liter of fuel can move for a distance of 1 km; 50 tons by car, 97 tons by rail and up to 127 tons by riverboat. Despite this, inland waterways transport is considered the only niche transport in Poland - its share in the overall transport of goods accounts for only 0.7% (both 2005 and 2015). Following are the many reasons why this occurs.

The primary reason for this is undoubtedly bad technical condition of waterways in Poland. In 1970, there were 4,615 km of navigable inland waterways, whereas in 2015 a thousand kilometers less, i.e. 3,655 km (3,638 km in 2005). In addition, up to 90% of these inland waterways do not meet the legally required standards. The most significant obstacles in inland waterway transport in Poland are too small depth of fairways, road and railway bridges that do not meet basic standards, locks and weirs failures and prolonged interruptions in navigation resulting from freezing or too low water levels\(^3\).

The main cause of progressive degradation of waterways were, according to the report of NIK, insufficient financial resources, which covered only 20–30% of needs. The cause for such circumstance was associated with the priority given to highway construction and modernization of existing railway lines, although in the European Union inland waterways transport was promoted due to its proven record being much more efficient than any other means of transport and was consistently environmentally friendly. In addition to insufficient financial support the inland waterways instruction suffers from the outdated fleet, whose age far exceeded lifetime, and the operation was only possible thanks to the constant modernization. As it was clear from the data published by the Central Statistical Office in 2015 73% of exploitation pushers in Poland, 90% of barges self-propelled and 49% of pushing barges were produced in the years 1949–1979. In 2005 there were in Poland 11 tugs, 242 pushers, 95 self-propelled barges and 475 barges for pushing. While 10 years later there were 21 tugs, 196 pushers, 89 barges self-propelled and 511 barges for pushing\(^4\).

In 2015, inland waterways transport accounted for 11,928 thousand tones which represents a 24% increase over 2005. It seems that after the collapse that took place in 2009–2013 inland waterways began to recover and its share in the

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picture 3. inland waterway transport of goods in poland in 2005–2015 (in thousand tones)


total transport of goods and in the group transport niche increased. detailed data were presented in picture 3. it is worth noting that the average distance traveled by 1 tone of goods in island waterways was 133 km in 2005 – and 183 km in 2015.

maritime transport

maritime transport operates mainly in the international dimension, its performance depends on the commercial position of the state in the global economy as well as the global economic situation overall. the last decade was a period of significant change for maritime transport in poland. on one hand, poland had to deal with the crisis (since 2008 is noticeable decrease in goods transported by polish ship-owners) on the other hand, the technological changes directly affected the work of polish sea ports. the main elements of technological changes were the development of infrastructure around the port (i.e. construction of the a1 highway through which significantly improved movement of cargo to and from the ports of tri-city or to improve access to the aqua zone at the port of gdańsk) as well as the development of terminals (the construction of port infrastructure for the container base in szczecin, or upgrading terminal bct gdynia). moreover, polish accession to the european union in 2004 had a great impact on maritime transport, as well. thanks to accession poland gained easier access to overseas markets. the accession increased production and consumption in poland, which boosted foreign trade. data presented below (picture 4) do not represent the flow of goods through polish seaports overall (which was growing) but rather it represents the transport carried out by polish ship-owners, whose role from year to year was becoming more and more marginalized in the overall transport of goods in poland.
As mentioned, the importance of Polish ship-owners in the total transport of goods in Poland both in 2005 and in 2015 was marginal. This was due to the small number of vessels held by them. In 2005, Polish operators had 130 ships including, inter alia: 123 merchant ships and ferries. Among merchant ships were 76 to dry bulk ships, 13 tankers and 1 container ship. They total deadweight (DWT) was 2,610 thousand tones. Average age of ships was 20 years. In 2015, Polish operators already had only 102 different kinds of ships, including 85 merchant ships and ferries. Among merchant ships were: 58 dry bulk ships, 2 container ships, 5 tankers. Total deadweight (DWT) of all 102 thousand ships amounted to 2,515 tones, which means that even though the Polish operators had a total of 21 cargo ships less their total deadweight decreased only by 95 thousand tones (3.6%). Average age of ships was 17 years in 2015. It should be noted that, in accordance with global trends, the vast majority of Polish ship-owners of ships were sailing under foreign flags, although this trend was slowly changing. And so, in 2005 only 17 ships were sailing under polish flag (13%) and 113 (87%) foreign flags. However, in 2015 25 (24.5%) ships were sailing under polish flag and 77 (75.5%) foreign flags.

In comparing the structure of maritime transport by type and range of shipping you will notice significant changes. In 2015 compared with 2005 significantly decreased the amount of traffic especially in the field of deep-sea service.
Table 3. Maritime transport by type and range of shipping in 2005 and 2005 (in thousand tones)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liner shipping</td>
<td>6742</td>
<td>6212</td>
</tr>
<tr>
<td>deep-sea service</td>
<td>1254</td>
<td>598</td>
</tr>
<tr>
<td>short-sea service</td>
<td>5488</td>
<td>5614</td>
</tr>
<tr>
<td>Tramping</td>
<td>2620</td>
<td>751</td>
</tr>
<tr>
<td>deep-sea service</td>
<td>672</td>
<td>44</td>
</tr>
<tr>
<td>short-sea service</td>
<td>1949</td>
<td>706</td>
</tr>
<tr>
<td>Total</td>
<td>9362</td>
<td>6963</td>
</tr>
</tbody>
</table>


Transport of ocean liner shipping remains at the same level, but the number of tons transported in deep-sea service also in this sector has decreased significantly. This highlights the fact that Polish operators focus on transporting shipments on relatively short European and Baltic range. Details of these changes are presented in Table 3. These changes are also visible in the average distance traveled by 1 tone of goods in 2005 was 3,389 km and in 2015 only 1,830 km.

Air transport

Despite significant development of passenger air transport, carriage of goods via air transport in the last 10-year period has not particularly changed and persisted on average of 40 thousand tones (Picture 5). It was still only approx. 0.002% share in the total transport of goods in Poland both 2005 and 2015. One of the reasons for this was that the national airline LOT Polish Airlines does not have a dedicated fleet for the exclusive cargo handling and transportation of goods is based on the Company’s fleet of passenger aircraft. It should be noted that only some of them allow transport of larger quantities of cargo. Further, only Boeing 787-8 and Boeing 737-400 can carry the cargo while the other aircrafts at the disposal of the Polish carrier can carry loads in bulk which adversely affects the time ground handling.

To transport goods on routes over the North Atlantic Cargo Airlines leases Boeing 767-300 from cargo jet Ltd. In addition to LOT, UPS Airlines, European Air Transport, Emirates and Air Contractors were carriers operating in the Polish air transport market. The dominant port in cargo traffic was Chopin Airport serving...
approx. 75% of all cargo. Comparing average distance traveled by 1 tone of goods by air transport in 2005 and 2015 one could notice a significant change, it was 3.142 km in 2005 and 10-year leather the distance lengthened by 1 thousand km and it was 4.139 km.

Changes in the structure of niche in transport of goods in Poland in the years 2005–2015

Comparing the data from 2005 and 2015 a change within the niche can be observed. In particular, the Maritime transport lost its importance compared to the inland waterways transport, continuing trend observed for many decades (Picture 6 and Picture 7). Such persistent trend was due to, among other things, to the development of Polish sea ports, which handled more and more goods (in 2005, they handled 51,810 thousand tons, and in 2015, 69,735.5 thousand tons). These goods were
transported, but in large part by foreign ship-owners. The transshipment of goods in the port played an important role of inland waterway transport, which was used for handling numerous tasks, hence its share in the total transport of goods was growing. The air transport for the transport of goods stayed at the same level for the past 10 years and oscillated around 0.0024% -0.0021% of total transport of goods and 0.2% -0.3% in the transport niche.

Conclusion / Summary

The two most commonly used measures to transport goods in Poland, i.e. the railway and trucks serve a total of 96% of the market of transport in Poland. This situation has not changed for decades. Other means of transport even though they do play a marginal role are irreplaceable for the transport of specific types of goods, such as fuel, very heavy and bulky goods or goods that must be transported over long distances. Each mode of transport, therefore, is necessary from the point of view of the economy and marginalization of one mode would have a negative impact on the economy overall.

Bibliography

Najwyższa Izba Kontroli, NIK o żeglugie śródlądowej, Warszawa 2014.  
Risk-Oriented Approach to Multi-Criteria Evaluation of Investment Projects

This article discusses the problem of investment decision making in conditions of uncertainty and risk. Multi-component risk model as one of the criteria for the decision making is offered. The study presents the algorithm of the multi-criteria choice while taking into account interval preference relation.

Risk-oriented approach to multi-criteria evaluation of investment projects

In today’s Russia there is a very urgent problem of developing advanced forms and methods of management and implementing these methods in practice. Creating a system of indicators (including the decision-making criteria) for the analysis and predicting a problematic situation for the subsequent generation and selection of alternatives are crucial steps of economic decision-making [1]. The quality of decisions is largely determined by the choice of the best alternative.

The choice of the investment project directly depends on the evaluation of efficiency of the analyzed alternatives. In case of strategic decisions this circumstance should be taken into account to avoid spending substantial resources.

The versatility of economic activity cannot be expressed with a one-dimensional indicator [2]. Increasing attempts to reflect real conditions of decision-making in the analysis explain the growing interest in multidimensional methods of analysis and evaluation of economic decisions [3].

All enterprises involve investment activities to a varying extent. Investment decisions include the necessity to take into account various complicating factors – limited financial resources available for investment, actual investment, potential losses if the project will be less effective than it is assumed at the time of its creation. Risk assessment allows increasing the validity of project decision and reducing probability of adoption of the ineffective project [4].
In economic theory, we know a large number of indicators that allow to compare different investment alternatives. The literature most often recommends using the following indicators: net present value (NPV), discounted payback period (DPP), and internal rate of return (IRR) [2].

These indicators help making a decision about the acceptance or rejection of a project, or help selecting the optimal alternative from several possible options. However, they describe the effectiveness of the analyzed project from a different point of view. This leads to the necessity to apply a multidimensional criterion [3].

Two main methods for calculating the “payback” indicator are described in the literature. The first approach takes into account the point of view of the owner of capital. The payback period is calculated as the period over which the owner makes a profit equal to the amount of capital invested. This implies that the project at least provides the conditions of simple re-investment with a certain time factor. An alternative method presents the point of view of the business manager. The most important characteristic for him is the size of the NPV. In this case, the payback period is determined as the time of the return of the NPV, which compensates the amount of capital invested in the project.

A comparison of alternative projects on the basis of these parameters may lead to a different ordering of analyzed alternatives. This is especially true when you consider the dynamics of the various factors influencing the effectiveness of projects. NPV reflects the opinion of the company’s management about the effectiveness. Therefore it should be more effective to use the payback period indicator calculated on the measurement of profit as a component of a multidimensional criterion in our case.

On the basis of the indicator IRR another ordering can also be obtained [5]. Using this parameter allows you to partly solve the problem of comparing investment projects with different amounts of capital investments and different terms of implementation. However, at various discount rates preferences may be different. Theoretically the same amount of investment and / or a term of alternative projects is required. Typical recommendations for the calculation of efficiency of investment projects suggest choosing the NPV indicator.

The above considerations lead to the conclusion about the need to evaluate the effectiveness of alternative investment projects based on multi-criteria choice. Identifying the most effective investment project requires an analysis of the best combination of values related to diverse characteristics of the investment projects. The need to evaluate alternative solutions in terms of several criteria is complicated by the multiplicity of indicators for which it is difficult to obtain accurate estimates due to the complexity of projects.

Another serious problem is that the investment projects are usually carried out in a risky environment. Such risks may cause an increase or a decrease in cash flows generated by the investment project. As a result, there is a chance that the objectives of the investor will not be achieved, and investor will incur losses.

The size of losses and their probability determine the risk of each type of business activity. Risk assessment of the alternative investment options is therefore necessary.
There are two complementary types of project risk analysis: quantitative and qualitative. Qualitative analysis determines the factors, scope and types of risk. The aim of quantitative analysis is to measure the identified risks and the potential damage that would be caused by the failure of the investment project.

Variety of investment project risk seriously complicates the task of qualitative analysis, including risk classification. The literature suggests different approaches to solving this problem. It seems reasonable to classify the risks in terms of their area of origin [2]. Calculating economic efficiency in conditions of risk requires the identification of risk factors in classified areas, the identification of risk situations, as well as matching risk situations with corresponding consequences for the investment project [4].

Quantitative risk analysis includes quantitative assessment of individual risks and the overall riskiness of the project. At this stage the potential damage should be determined. Methods for the quantitative risk analysis include statistical analysis, scenario-building, expert assessments, analytical methods, and the use of a decision tree and simulation [6]. Each of these methods has certain disadvantages which can be overcome by using an integrated approach.

Modern methods of calculating the efficiency of the investment project involve the use of a one-dimensional criterion. The risk situation is taken into account with the help of the sensitivity analysis. The authors propose an approach based on the method of multi-criteria selection with the interval estimation of the riskiness.

In [7], the authors proposed an approach based on the calculation of the net present value, discounted payback period, and internal rate of return for each of the analyzed alternatives. Here we continue the development of this approach and consider in more detail how to take into account the risk component of multi-dimensional assessment. We suggest including in the algorithm the expert forecast of the future market conditions and risk assessment of each of the possible situations.

Let us assume that an expert survey is conducted and intervals of an assessment of indicators NPV, IRR, DPP and risk for several investment projects are determined. We also assume that experts reflected intervals of estimates both in natural units of indicators, and in points. We can now estimate the efficiency of investment projects and to choose the most preferable one (indicators of efficiency are diverse).

Let \( P = \{P_a, \alpha = 1...n\} \) be a set of alternative investment projects, \( K_i (P_a) = [A_i(P_a); B_i(P_a)] \) – criteria of an assessment of efficiency of each IP, \( i = 1...r, r \) – total number of criteria of an assessment of IP, \( P(I_a) = \{P_1(I_a), P_2(I_a), \ldots P_r(I_a)\} \) – a vector indicator of estimates of efficiency of each IP.

Our problem now is to construct a Pareto’s set in which the elements of considered options satisfy one of conditions

\[
K_i (P_{r_j}) = \min[K_i(P_a)], P_{r_j} \in PP \quad \text{or} \quad K_i (P_{r_j}) = \max[K_i(P_a)], P_{r_j} \in PP
\]

where PP is the set of Pareto-optimal investment projects.
The algorithm of finding the Pareto set under interval preference relation
1. Provide the degree of dominance of alternative 1 above alternative 2 on interval criterion by interval membership function and determine the ratio of the strong interval preference.
2. Find the value of the membership function for each pair of variants for each criterion and build the scoring matrix.
3. Determine coefficients of criteria importance as values of the membership function of the set of non-dominated alternatives.
4. Choose the best alternatives for individual criteria
5. Create matrix of the pairwise comparison and matrix of preferences.
6. Sequentially select elements of the Pareto set based on the hard ranking scheme.

Summary
The suggested algorithm of the investment project selection is adapted to the risk situation. The diversity of economic interests in the economic system is taken into account. The proposed algorithm also provides the possibility to reflect the uncertainty of the forecast states of the system. This is achieved by describing the risk situations with multi-component indicator of the risk as one of the criteria for decision making. This approach increases the possibility of using the multi-criteria selection method for a real business environment. The proposed investment project selection algorithm allows us to take into account the diversity of interests inherent in the economic system and the uncertainty of the environment in which economic activity takes place. It is most relevant to complex decision-making by professional management in a commercial organization. This investment project selection algorithm can be recommended for long-term strategic decision-making in situations of risk.

Bibliography
The Effect of Corporate Social Responsibility on Risks of Oil and Gas Companies

Corporate social responsibility performance reduces all types of risks, such as financial and non-financial, that oil and gas companies take. Based on the stakeholder theory, corporate social responsibility strategy should be built to balance the interests of multiple stakeholders.

Key words: corporate social responsibility, stakeholder theory, risk taking, oil and gas sector.

The oil and gas industry has been among the leading industries in championing corporate social responsibility. The advancement in corporate social responsibility as a phenomenon may be explained by impact and volume of the companies. This is partly due to the specific features of the oil and gas sector of economy and the negative effect of these companies' operations such as oil spills. The impact of energy-related pollution on air quality and environment in general has become a matter of rising social and political concern in many countries. In addition to this it can be partly explained by the fact that these negative effects are highly visible and can result in protests of local communities and bigger civil society groups. Gas and oil companies are getting more and more under the media tracing pressure. That is why oil and gas industry is to be one of the most vulnerable sectors of economy.

The main categories of risks for oil and gas companies to consider are financial, operational, compliance and strategic. The article is mostly focused on the operational risks that is explained by the character of the sector. Although operational risks are experienced also at the corporate level, this article mainly focuses on what impacts everyday pipeline, well, and plant operations. The operating process of the oil and gas industry is characterized by harsher environmental conditions, increas-
ingly remote geographical locations and unconventional processes to extract hydrocarbons.

There are still a number of approaches but no agreed definition of corporate social responsibility. Now it is concerned as a component of business strategy and a concept that has emerged as an approach for addressing environmental, social and economic impact of business on a voluntary basis. These social, environmental and economic concerns are integrated in their business operations and interactions with different groups of stakeholders.

In this context corporate social responsibility programs turn out to focus on balancing company’s interests and stakeholder requirements upon which the company depends.

The outlook of corporate social responsibility reports and reports of sustainable development of the world’s biggest oil and gas companies according to The Platts Top 250 Global Energy Company Rankings shows that their corporate social responsibility involves a wide range of activities such as:

• environment-oriented initiatives including environment protection and minimization of their negative impact on environment;
• social programs which are aimed at local communities and the society in general which means working in partnership with indigenous people;
• restoring and improving the infrastructure in the areas where oil and gas companies operate;
• community investments including charity and sponsorship.

Although usually leading companies in the oil and gas industry demonstrate awareness of corporate social responsibility, they implement all these groups of activities and their social responsibility strategy appears to be quite similar. This article rejects the idea of one strategy for any company in the industry as a number of different external and internal conditions affect corporate social responsibility of each company, especially such big ones as oil and gas majors. Among the internal conditions Wozniak M.G. notes the position of the company in the market, economic situation and organizational culture. And external determinants of corporate social responsibility include government policy regarding economical, ecological, social sustainable development goals, economical situation and others. It means that there is no universal strategy for corporate social responsibility.

Corporate social responsibility is one of the areas nowadays in which stakeholder theory has been commonly applied. The stakeholder theory is based on the idea that there is “a wide range of groups who can affect or are affected by the corporation, its stakeholders”. According to Freeman R., one of the categories of the stakeholder concept is corporate social responsibility model of stakeholder management.

While balancing company’s interests and stakeholders’ expectations in order to minimize risks the company should make the following steps:

• figure out key stakeholders which mostly affect the company. That is important for oil and gas companies in order to make strategic decisions about which programs and projects are to be developed first to ensure their company’s best performance;
make decisions about necessary resources, such as material and organizational;
use that resources to create corporate social responsibility programs that would satisfy key stakeholders’ expectations.

As being a core part of modern oil and gas companies’ internal culture and their strategy, corporate social responsibility turns out to involve challenges. Jessica Davis Pluess notes that the business processes and systems need to manage the complexities of social and environmental performance – specifically the coordination across functions responsible for environmental impact, legal issues, procurement, HR, government relations, and community affairs.

On the other hand, the payoffs for oil and gas sector are high so that such companies make this a priority and find the ways to overcome the challenges they encounter while working on social responsibility in order to pursue the development and growth. Stakeholder theory turns out to be one of the ways to gain these advantages. By satisfying key stakeholder needs oil and gas company gets the opportunity to minimize short and long term risks that could be caused by those groups of stakeholders.

Bibliography
Innovative Performance Modelling in 3D-Management
Within the Re-Constructed Business-Processes

Innovative system of enterprise is built on two key components: correct use of the resources and strong will to introduce a change. The 3D-management system allows to dramatically improve company’ efficiency within a new model of using available resources and a new construction of business-process and information flows.

Technological innovations of successful Western companies, such as Apple or Tesla, are based on a specific governance mechanism, which includes a comprehensive approach to the organization of information flows and the way of involvement existing enterprise’ resources in a new line of action. The analysis of errors and achievements made by the leaders of successful Russian companies and the study of the experience of effective Western businesses permitted to build the system of 3D-management. The re-thinking and re-construction of the business-processes and of the whole business scheme of the corporate unit allows to improve the efficiency of the company on the basis of a new model of use the available resources.

3D-management is the author’s management approach developed by Serguey Kapitsa, based on his 20 years of experience of consulting within Russian companies and conducting the own business of business-trainings [Kapitsa, 2008]. The 3D-management model is based on proper engagement of the human resources in the corporate tasks solving, this involvement of social and psychological elements of personality permits to re-organize the vision of a company within the frameworks of people, employees and managers, as the essential context and foundation for the business development.

To achieve this corporate-human identity, 3D-Management includes the reorganization of the enterprise internal communication system and the goal setting model, the
architecture of business processes and re-thinking of information flows. The reorganized information flows concern data transfer within the company to the different stakeholders’ groups and reporting, the re-built system of communicating meanings helps to get the tasks clear and structured for the company staff, the transfer of technology and knowledge are more open and transparent [Pokrovskai, Wei, 2016] taking into account the richness and diversity of knowledge and implementing the implicit “spiral of knowledge creation” [Nonaka, Takeuchi, 1995] in the organization. These changes are summarized in the 3D-management concept 4 key components of the effective governance mechanisms:

1) cascade of goals represented as a Plan of development of the enterprise – the tasks allocation mechanism (“how to eat an elephant by parts”), which permits to determine the scope of activities and targets for each hierarchy level in accordance with the competencies of human resources involved. This model is aimed at the construction of a scheme of correspondence between the competencies of each person and the position he / she occupies in a particular level of the hierarchy of decision-making in the framework of the “tree of objectives”. This modeling helps to avoid the subjective feeling of “congestion” work and uses the based-established skills, acquired knowledge and capacities, taking into account investment planning in human capital (“anticipatory learning”);

2) communication system – despite the technologizing and active biasing problems of the data transfer within the scope of engineering and information and communication technologies (ICT), the organization of communication within and outside the company is a function of self-management and management of the corporate unit. Different levels of emotional intensity, the hierarchy of messages and meta-message, classification and structuring information identify the direction and set the speed of business development or, on the contrary, reveal the “stagnation” of communication flows. A well-built communication system allows employees to perceive signals from the top, the higher levels of the management hierarchy;

3) motivation of the human resources involved – the definition of adequate remuneration system is based on the assessment of the contribution of each employee according to the refined or newly developed KPI. Motivation reflects the assessment of remuneration and rewards, including the internal motivation such as a pleasure to participate in this important and interesting business [Pokrovskai, 2014], but also external motivation with the financial compensation of labor, for expended consumption on the basis of the amount received. Motivation problem can be interpreted as a whole set to ensure the adequacy of the remuneration for labor contribution. On the part of an employee incentive system should be fair, that is, exclude the feeling of lack wage [Adams, 1963]. From the position of the head of a department, the functional task of the personnel motivation system is to increase the value of tangible and intangible rewards and strengthening of the
subjective beliefs (estimates of the probability, according to the V. Vroom theory) in the connection between the efforts made, which are invested in a common activity, and the expected reward. If the employee is sure that his/her contribution to the common cause will be followed by an adequate and meaningful (subjective value for a specific employee) fee, the system eliminates the manager’s dissatisfaction with insufficient efforts of the staff;

4) advanced training system (“anticipatory learning”) – a model of the transfer of technology and knowledge within the company, from one unit to another (for example, the introduction of new equipment) and is a model to determine the feasibility and selection criteria of the educational program for staff development. This arrangement distributes the responsibility for the competence and qualifications of the employee and the adaptation of his knowledge and ability to change working conditions between himself and the head of the employee.

These 4 components can be combined in a model of building a business processes chain – with the purpose of construction of a transparent business technology, as a “pipeline” processing line of value creation, as a way to give meaning to each transaction and support all functions that allows to management to form an essential rod, on which the remaining management functions are strung [Kapitsa, 2013] (the communication scheme of information flows, the distribution of resources and power in accordance with the cascade of objectives, staff motivation and remuneration, advanced training system).

3D-management reflects the business development in the space defined by the three axes: objectives, resources, perspective. Depending on the position in the hierarchy, these three measurements can be taken in several different ways:

- targeted tasks at the level of an ordinary employee are converted into objectives to be achieved at the highest top manager level, the goals reflect the different aspects of a single business vision, common for everyone in the company;
- resources include all the unique opportunities that exist in the company, and primarily, the humans, the personalities involved in its activities (members of the organizational structure, of division line or experts involved in the project [Kapitsa; 2009]), these relations should be built productively;
- temporal axe, the outlook, reflects both the fixing of terms and understanding of the evolution and dynamics of technology, industry market, the perception of customers, staff competence, etc. For the head of the company, this dimension reflects the variability of internal and external business environment.

Functions of goal setting, communication, motivation and training are forming the complex business ruling technology for value creation and development. Optimization of business schemes embodiment in reality takes into account the limitations and unexpected changes in the environment forms a continuous line of creative work, combining creative and analytical skills and critical competences of human beings and technology opportunities.
Conclusion

The 3D-management is created to structure the development cycle of a stable business model where the iterative phase changes regularly reproduced, providing the maximum satisfaction of the interests of participants. In this regard, the business process is a single logic circuit, wherein each of the systems plays an important role.

Bibliography


The purpose of this article is to examine the developments in internet marketing in Russian Federation, the United State of America and the European Union. The evolution and current state of e-marketing in the three markets mentioned above is investigated. Based on comparative analysis results the internet marketing growth potential is evaluated.

Keywords: Internet marketing, internet technology, marketing efficiency, digital strategy

1. Introduction

The current trend towards globalization makes it necessary for companies to introduce new technology in their daily operations. From being a critical success factor in not so distant past in today’s business world it becomes a survival kit. E-marketing is becoming a prerequisite for survival and success for any business affected by globalization worldwide. E-marketing differs from traditional marketing in that it involves the use of channels and methods that enable an organization to analyze marketing campaigns and understand what is working and what isn’t in real time. The key objective is to promote the brand, build preferences and increase sales through various digital marketing techniques.

Marketing traditionally focuses on “the cost of the product, its physical attributes (size, features and functions) and the margins they seek from the product” [12]. Web-based marketing more specifically “entails using the Internet to provide information, to communicate and to conduct transactions” [40]. The degree of independence of the
online marketing division in a company is directly proportional to its internet presence in accordance with the business model and therefore differs significantly among industries and companies. The online marketing started to emerge in 1994 when the first graphical browsers were published and banners on web pages were being used for advertising.

E-marketing activities include search engine optimization (SEO), search engine marketing (SEM), content marketing, content automation, campaign marketing, and e-commerce marketing, social media marketing, social media optimization, e-mail direct marketing, display advertising, and any other form of digital media. It also extends to non-internet channels that provide digital media, such as mobile phone, via SMS and MMS. In order to be competitive, companies should consider how e-marketing is used by their potential customers and understand their motivation. The impact of internet marketing is very strong on the performance of companies.

In today’s world with the trends toward globalization and increasing competition in order to successfully operate and display growth companies have to seriously consider moving towards the zone of enterprise and pure play level of commitment to e-business if they have already not done so [39]. The current analysis concentrates on examining the evolution and current state of e-marketing in three promising markets of the US, Russia and France. France was chosen as it is very much representative of the internet marketing situation in Europe. E-marketing future prospects are discussed for the above mentioned promising global markets.

2. E-marketing on the global markets of the US, Russia & France

The global situation with e-marketing could be best described by the statistical data summarized in table 1.

<table>
<thead>
<tr>
<th>Total population</th>
<th>Active internet users</th>
<th>Active social media accounts</th>
<th>Unique mobile users</th>
<th>Active mobile social accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.210 billion</td>
<td>3.010 billion</td>
<td>2.078 billion</td>
<td>3.649 billion</td>
<td>1.685 billion</td>
</tr>
</tbody>
</table>

Urbanization 53% Penetration 42% Penetration 29% Penetration 51% Penetration 23%

2.1. E-marketing in the US

E-marketing has its origins in the United States. Therefore, the US companies utilize digital marketing technology the most on the global scale. The industry has experienced the highest growth between 2010 and 2014. In 2014, the spending on digital marketing reached a new record and rose to a high of $49.5 in 2014. That is a 15.6% growth compared to the digital marketing spending of 2013 of $42.78 and the highest spending that was ever made on digital marketing [23]. The segments that have grown the most between 2013 and 2014 are the mobile and social sector [23]. Mobile advertising includes the ads that are placed on smartphones, feature phones and media
tablets and appear through display ads, text messaging ads, search ads, audio and video ads or which appear on mobile websites. Social Media Advertising takes place on social platforms, such as Facebook or Twitter and appears on all types of devices, including desktop, laptop, smartphone and tablet. In contrast to the growth of mobile and social media marketing, the overall leading ad format on the US market remains the search sector [23]. This form of marketing works through search engines as a result of searches of the potential customers.

Even though the spending on digital marketing has been growing throughout the last years in the US market, television marketing remains the main media type of advertising percentagewise, that is used in the United States [16]. This type of marketing reaches the potential customer through commercial breaks on television programs or infomercials.

Taking into consideration the total spending in US dollars, it can be clearly seen that the USA is the global leader in total spending with respect to digital marketing, far ahead of China and the UK [13, 14].

As was described, the US is a one of the main markets in terms of social media, search engines and e-commerce. In January 2015, out of its 320 million inhabitants, there were almost 280 million active internet users, and 186 million users of social media accounts. These numbers show a clear tendency to growth. The average time spent by an average American per day using different types of media equals about 12 hours [16]. The e-marketing penetration for the US could be summarized in table 2.

<table>
<thead>
<tr>
<th>Total population</th>
<th>Active internet users</th>
<th>Active social media accounts</th>
<th>Mobile connections</th>
<th>Active mobile social accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>320million</td>
<td>280million</td>
<td>186million</td>
<td>329million</td>
<td>160million</td>
</tr>
<tr>
<td>Urbanization 82%</td>
<td>Penetration 87%</td>
<td>Penetration 58%</td>
<td>Penetration 103%</td>
<td>Penetration 50%</td>
</tr>
</tbody>
</table>

Media content can now be consumed 24 hours a day in a variety of digital and traditional formats, via personal computer/laptop, tablet, mobile phone or games console. The time spent using various media types is presented in table 3.

<table>
<thead>
<tr>
<th>Average daily use of the internet VIA a PS or tablet (Internet users)</th>
<th>Average daily use of the internet VIA a mobile phone (mobile internet users)</th>
<th>Average daily use of the social media via any device (social media users)</th>
<th>Average daily television viewing time (internet users who watch TV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4Hours 55Minutes</td>
<td>2Hours 27Minutes</td>
<td>2Hours 43Minutes</td>
<td>3Hours 40Minutes</td>
</tr>
</tbody>
</table>

There are also some emerging devices being used, such as smart television (a television that can connect to the internet) or smart watch. This growth could be explained
by the development of various online offers, the development of social networks and the fact that the price of the equipment goes down. Another recent trend in digital marketing is online shopping which is becoming increasingly popular. In 2014, the number of online shoppers was almost 200 million and the forecast is that it will be more than 210 million in 2017 [16]. Mobile sales currently represent about 11% of total online sales, according to Comscore, which predicted a strong growth in this segment in 2015.

As for the most popular search engine in the United States, Google is on the top. It generates more than 60% of all core search queries. Microsoft Sites and Yahoo have a search market share of 30%. Ask Network accounted for 1,8% of explicit core search- es, followed by AOL, Inc. with 1,2% of the market share [10]. There could also be observed the rise of alternatives for search tools which allow for more privacy and collect less data for advertisers and security agencies, such as DuckDuckGo [26] or Yippy.

Social networks are also becoming increasingly popular. Facebook is the second most visited website after Google. YouTube and Twitter are also in the top ten [42]. Hence social networks represent huge opportunities for marketers.

Nevertheless, despite positive developments and opportunities, the American market still faces a certain numbers of challenges. With a progressing rate of digital tools’ availability, there are more opportunities in terms of digital marketing. The different marketing tools in turn have to adapt to that. Nowadays, consumers use multiple digital channels. Hence it is important for marketers to adapt their responsive web design to different interfaces, such as mobile, smartphone or tablet. Since April 2015, the leader of web search engines, Google, penalizes non-mobile sites [8]. The web site with a responsive interphase has a better ranking in the search results and marketers must take this into account, which often times is rather challenging. With the expansion of mobile phones in the US it is possible and necessary for successful marketing to track the customers with the mobile phone. The iBeacon technology notably enables this. It sends targeted and personalized promotions depending of the user’s location. The outfitting store, Macy’s, has adopted this technology in their stores. iBeacon enables them to detect shoppers’ exact locations and then to make ads and coupons appear on smartphones so they can buy the merchandise in front of them [44].

The development of different digital tools permits to also collect more information about the users. It is rather challenging, but would definitely payoff in the midterm and long run. Utilizing revenue management technology in digital marketing would allow business to be more robust and competitive [3]. More and more various channels to contact customers or to recruit new ones should be utilized. Multichannel contact strategy integrates contact channels in a single system capable of managing their interactions. Consumers leave behind a huge trail of data in digital channels. It is rather difficult to collect and process all that data, as well as find the right data within exploding data volumes that can help to make the right marketing decisions. Therefore, revenue management represent a challenge, as data has to be collected and analyzed, but at the same time creates a significant opportunity. It is very important to connect up
data sources and form a coherent customer view across different channels. That is why marketing automation becomes more acute than ever. Marketing automation is “the use of software to automate marketing processes such as customer segmentation, customer data integration, and campaign management” [37]. The use of marketing automation makes processes that would have otherwise been performed manually much more efficient, and makes new processes possible. It is nearly a requirement for any business that wants to stay on top. Marketing automation is an integral component of customer relationship management [37].

The ability to reach the target audience is often a key factor when making the decisions with respect to the allocation of media budgets. Nowadays, via the artificial intelligence segmentation it becomes more and more precise. Google, the company founded by Larry Page, is interested in the artificial intelligence in the course of recent years. In 2014 Google acquired DeepMind, a British artificial intelligence company [31]. Facebook had tried to buy it in 2013 but the negotiations failed. The Google web search engine collects and processes huge amounts of data, which can become much more efficient with the help of artificial intelligence. Through the artificial intelligence, the web search engine simulates the thinking processes of a human brain and can make much better recommendation in their results. This allows marketers to reach their customers, this is why they need to take it into account in their SEO strategy.

Digital channels are relatively cheap, compared with traditional media, making them within reach of practically every business of every size. There is an abundance of content available. As a result, it’s becoming a lot harder to capture consumers’ attention. That is why it is becoming more and more important to concentrate on targeted quality content. The content marketing is considered as one of the most commercially important digital marketing trend for 2015 [5]. The content marketing is the communication with the customers without selling. Instead of pitching about products or services, it delivers information that makes the buyer more intelligent. It is a great way to engage with customers and to provide them with expert knowledge to help them during their buying process of any product or service. The content marketing permits also to increase traffic to the site. Updating the website with relevant content, which is of high quality, gives also a positive impact on search ranking.

In addition, the development of social media provides a growing opportunity for branding and improves conversion rates as well as provides for gaining new conversion channels. More and more companies integrate social media into their marketing campaigns. It facilitates and promotes the development of participatory marketing, which amplifies the information diffusion phenomena and helps transform viral marketing word of mouth more or less controlled by the brands. Currently, the social platform, Twitter, and the leader of the search engines Google, plan to engage in a partnership. They want to integrate tweets in Google search pages as real-time results. This would provide for new opportunities. It will require a closely integrated search and social teams who optimize tweet and social message to contain high-value key phrases.
Tweets would need to be treated like ads or landing pages, with a meaningful call to action in the tweets or with a link to the brand site with more information. Companies also need to be more dynamic and engaging, with the integration of real time operation mode into the search results. If brands have had a stance of staying out of conversations that might impact them in a negative way.

Furthermore, the information and communication technologies are a powerful source of advice on demand. Live-chat, video appointment with a salesperson, hot-lines open round the clock, quick answers to questions on social networks’ customer service adapt more and more to online demands. Zappos, the online retailer, has used incredible customer service through digital marketing to create an extremely loyal customer base.

The different digital marketing tools are becoming more efficient and involving. The future prospects for digital marketing in the US for 2014 to 2019 is that the market will be growing [16]. This appears quite logical, especially taking into account that the internet keeps on growing and companies in the United States are always outstandingly active on the digital market and will probably use the innovations continuously to their benefit. Moreover, they will maintain their positions on the digital market, which can be achieved via significant investments. As a consequence, for the next four years, the forecast promises an increased growth of overall spending on digital marketing in the US. The major key to success in digital marketing in the US is the content marketing, which creates and shares content to attract, acquire, and engage a target audience through media and publishing content. US companies, which will be successful in digital marketing, among other factors, would continue to experiment excessively with innovative ideas, humanizing their brand and cooperating with other companies.

2.2. E-marketing in Russia

Russia is the largest country in the world and it also represents a huge market for digital marketing. The Internet usage in Russia has been growing significantly for the past 10 years. In 2015 there are around 87.5 million active internet users and 67 million active users of social media accounts [11]. Russia has more internet users than any other European nation and became the largest online market in Europe in terms of amount of active Internet users back in 2012 and holds this position ever since. When it comes to online retail turnovers Russia however is still behind European markets as the Russian online market is less mature than the Western as Russians don’t trust online merchants as easily. Thus only 17% of the Russian Internet users actually buy products or services online. The total size of the Russian online market is estimated to be 16.5 billion USD (far away behind USA with 384 billion, or China with 182 billion) and represents only 2% of the total retail sales but it is expected to grow fast [36]. The data on e-marketing penetration for Russia is summarized in table 4.
Table 4: E-marketing penetration in Russia

<table>
<thead>
<tr>
<th>Total population</th>
<th>Active internet users</th>
<th>Active social media accounts</th>
<th>Mobile connections</th>
<th>Active mobile social accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>146,3 million</td>
<td>87,5 million</td>
<td>67 million</td>
<td>245.2 million</td>
<td>38.2 million</td>
</tr>
</tbody>
</table>

Urbanization 74% Penetration 60% Penetration 46% Penetration 168% Penetration 38.2%

If for the rest of the world the leading search engine is Google, in Russia the audience is almost completely divided in half between Google and Yandex, with Yandex being even more popular than Google. As for the social media the leader is the social media platform Vkontakte (220 million registered users). Facebook, however, being the most popular in the West, is only the fourth most used social media platform in Russia (8.4 million Russian registered users), behind Vkontakte, Odnoklassniki and Moi Mir. Other social media like Twitter and Instagram are not the most popular in Russia, however they have been recently winning more of the Russian users. What is interesting with this variety of social networks is that it shows that the users are not homogeneous, and each social media platform attracts a different marketing segment of the audience. Facebook is a good example of this phenomenon as the Russian Facebook audience is generally older than that of VK, has higher education and possess high English level skills. This difference with the West makes digital marketing in Russia different while marketers would have to navigate between several social media platforms in order to get the most audience as using only Facebook is far from being enough.

There are 39000 Internet shops in Russia but only 10% of them could be rated as sustainable. Generally in the field of e-commerce, the local scene is dominated by local players like Ozon.ru (the first Russian online retailer), Ulmart.ru, Lamoda and others. Several Western brands have also recently established themselves on digital landscape in Russia. For example eBay and AliExpress have Russian sites and Amazon also delivers most of its products to Russia [15]. In addition to these cross-border sales options there are also the Otto Group and La Redoute as well as Yves Rocher which succeeded in establishing their presence on the domestic market. It could be concluded that the Russian digital market is still under development and unlike the highly developed US market the competition is rather weak which represents a significant opportunity for companies which can adapt their e-marketing strategy to the Russian market. At the same time, Russians spend more and more time on-line. The relevant data is presented in table 5.

Table 5: Average time spent on-line per day using various media in Russia

<table>
<thead>
<tr>
<th>Average daily use of the internet VIA a PS or tablet (Internet users)</th>
<th>Average daily use of the internet VIA a mobile phone (mobile internet users)</th>
<th>Average daily use of the social media via any device (social media users)</th>
<th>Average daily television viewing time (internet users who watch TV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Hours 47 Minutes</td>
<td>1 Hour 42 Minutes</td>
<td>2 Hours 38 Minutes</td>
<td>2 Hours 29 Minutes</td>
</tr>
</tbody>
</table>
In addition to the weak competition and increasing time Russians spend on-line, another reason for foreign companies to capitalize on the e-commerce in Russia is the willingness of the Russians to consume the overseas brands [4]. Russian prefer to buy overseas more than at home, trusting that they are getting better quality goods, as they often doubt the quality of some domestic brands. Especially when it comes to luxury, automobile, clothes or cosmetics the Russian are looking for foreign brands. For example in 2013 the top 25 brands search for on Yandex were all overseas fashion brands [4].

Russians are also very active on the internet; the mobile phone penetration is among the highest in the world. Russia’s e-commerce is projected to grow massively from $12 billion in 2014 to more than $72 billion by 2020 [6] which represents a huge opportunity for Western businesses especially. It means that the Internet would be the most efficient way when it comes to marketing as this connectivity clearly simplifies the access to Russian consumers. In addition to this connectivity the Russians are also starting to spend more and more on the Internet. The purchasing power was growing until recently, and even the economic problems which Russia is facing don’t seem to slow the growth of internet purchasing. On the contrary it has even grown more with the average amount spent online growing by 23% in the first six months of 2015 [33]. Indeed, the unfavorable economic situation would encourage people to buy online as the cost of content on the Internet is lower than of similar products offline. The fact that Russian users are starting to use the Internet more to buy products represents a significant opportunity for marketers, but only for those who can adapt to the Russian market.

The size of the market is rather huge and certain challenges need to be considered. The first challenge would be the size of the country. Because of its huge size, Russia has a lot of diverse regions which causes differences among the people in terms of income levels, online maturity and hence require different digital marketing strategies. Indeed Moscow and St-Petersburg are very advanced when it comes to Internet usage but this doesn’t represent the whole country with its 11 time zones, given that the Internet penetration is growing in other regions. Russia has 193 nationalities, which means there will be differences among the population when it comes to their purchasing behavior on the Internet. This is why crafting the right digital marketing strategy taking into account the differences between the Internet marketing segments in Russia would form the prerequisites for success on the digital landscape in Russia.

Another challenge would be the Russian language and the Cyrillic alphabet. Indeed, on average the English level skills of the Russian population are quite low, thus the English ads or catchphrases would be quite inefficient, which would have to be translated and adapted taking into account the Russian cultural differences. Marketers would have to adapt as it’s not just about translating a product description for example, while in order to be successful at marketing the product or service online one has to understand the cultural sensitivity in the language of target audience and most of the time the best solution is to use the help of the native speakers.
Also, due to the dominance of local search engines (Yandex) and local social media (Vkontakte), the Russian online market is to a certain extent self-contained. This is what makes the work of foreign marketers complicated as they cannot use the same methods and tools (Google or Facebook for example) to penetrate the Russian market with the same rate of success (number of clicks and conversions), or at least it wouldn't be enough to attract the target Russian potential audience in full. Hence it is crucial for foreigners to adapt their content to the Russian population and to build relationships with the established Russian internet players to succeed. Foreign marketers have to take into account the Russian behavior when it comes to purchasing. Indeed not all foreign online stores or foreign online projects are becoming popular in Russia, unlike in the West. The reason for that is usually a lack of knowledge on the Russian culture. Certain techniques do work for the Western population well but might not be successful for the Russian consumers. For example, putting pressure on the customer and suggest that there is no other choice but to buy the product would even probably repulse the Russian audience [17].

As we saw before the number of Russian users of the internet is already the largest in Europe and represents a significant opportunity. This number is expected to keep on growing in the future as for now it represents only around 56% of the total population of Russia. The mobile devices that allow to use the Internet wherever you go are also developing rapidly and Russia is no exception. The total revenue in the digital advertising market is expected to grow from 3.497 billion USD in 2015 up to 5.672 billion USD in 2020 in Russia [18]. Thus we can conclude that digital marketing has great prospects in Russia.

Currently Russia is facing a period of unstable economy which could bring further challenges for the business. But we can use the example of the 2008 global crisis to say that it won't have a bad impact on e-marketing as we saw that the Internet advertising market increased by 55% back then.

In order to be successful in the online landscape first one has to check whether the market for a particular product was already formed. To do so the best way is to see how often it has been looked for on the internet using tools such as Google Trends. But as we saw before, in Russia the number one search engine is Yandex which also provides a similar tool. The company has to adapt their methods to the landscape of Russian Internet, which is much different from the West. Thus using the same Internet platforms than the company used in the West won't be effective enough. Using the proper tools allows for reaching out to the Russian audience in full. Indeed, the main reason for failure on Russian markets is lack of knowledge when it comes to the Russian culture and the Russian mentality, which must be taken into account as it deeply affects the purchasing behavior in Russia, on-line behavior being no exception. A company could use the right marketing tools but if their advertisement doesn't catch the attention of the Russian audience it won't be effective. Moreover a brand should not try to just sell online, but the company should also invest into building a brand off line and establish-
ing its social presence. Indeed, some brands succeeded by using the Russian culture and history in their advertisements. For example Mars and Snickers which celebrated their twenty years in Russia with advertisement campaign presenting the brand as a constant through the changes that occurred in the country. Volkswagen which made a TV campaign advertisement for the Sochi Olympics games [32] is another example of that. These brands are proper examples of how one can attract the Russian audience by integrating their brand in the Russian cultural landscape. Another way to succeed in Russia is to act the same way the locals do. The Russian advertisers are in the best position to attract Russian consumers as they know their behavior. Thus, for a foreign marketer using the « Russian marketing technics » is the best way to establish in the Russian market.

When it comes to more precise methods of e-marketing, Anna Oshkalo, a Russian Internet expert has established the top five trends which would be the most used and the most efficient in online marketing in Russia [36, 38].

• Retargeting

Retargeting means advertising depending on the previous research and the previous websites visited by the consumer in case he or she didn't actually buy the product. This method is already used and is expected to grow more as it’s a good way to retain visitors and turn them into loyal customers. It is mainly used through display advertising or on social media.

• Social Media Marketing Diversity

This became indispensable to promote and increase traffic to the website. However the trend is to use not only the most popular ones such as Vkontakte or Odnoklassniki but also other less visited sites like Instagram, Pinterest and so on. Indeed, in Russia the audience on different social networks is not homogeneous and this can be used to attract different marketing segments.

• Mobile advertising

As we saw before the mobile penetration in Russia is one of the highest in Europe, this is why mobile advertisement is becoming an important part of an e-marketing campaign. Indeed, today most of the brands have not only a mobile version of their websites but also mobile applications. This allows being even more “together” with the consumer.

• Performance-based marketing

With this method the purchaser pays only when there is a measurable result. This is a method which was quite popular during the crisis of 2008 and which will therefore probably be useful in this period of economic instability.

• Quality Search Engine Optimization

This technic offers the possibility to be more visible on a search engine research. The quality will be taken into account more as marketers seek to improve the user behavior, reduce the bounce rate, increase page views and keep users on sites longer.

All of the above forms a roadmap to success on the Russian marketing landscape.
2.3. E-marketing in Europe & France

There are more than 738 million inhabitants in the European market, among them more than 539 million are using the internet [43], making them all potential targets for digital marketing. This number continues to increase. Europe is now the second [25] largest population using internet in the world and the second region by market penetration with a penetration rate of 73.5%. Hence digital marketing developed quite rapidly in this area over the last years. Two-thirds of European marketers estimate that marketing has changed more in the last two years than in the previous fifty [19], according to research carried out in 2014 by Adobe. The e-marketing penetration for the European market is presented in Table 6.

Table 6: E-marketing penetration in Europe

<table>
<thead>
<tr>
<th>Total population</th>
<th>Active internet users</th>
<th>Active social media accounts</th>
<th>Mobile connections</th>
<th>Active mobile social accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>837 million</td>
<td>584 million</td>
<td>387 million</td>
<td>1104 million</td>
<td>287 million</td>
</tr>
<tr>
<td>Urbanization 72%</td>
<td>Penetration 70%</td>
<td>Penetration 46%</td>
<td>Penetration 132%</td>
<td>Penetration 34%</td>
</tr>
</tbody>
</table>

The time spent using various media types is presented in table 7.

Table 7: Average time spent on-line per day using various media in France

<table>
<thead>
<tr>
<th>Average daily use of the internet VIA a PS or tablet (Internet users)</th>
<th>Average daily use of the internet VIA a mobile phone (mobile internet users)</th>
<th>Average daily use of the social media via any device (social media users)</th>
<th>Average daily television viewing time (internet users who watch TV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Hours 53 Minutes</td>
<td>1 Hour 17 Minutes</td>
<td>2 Hours 00 Minutes</td>
<td>3 Hours 10 Minutes</td>
</tr>
</tbody>
</table>

European companies are trying to integrate more digital marketing in their activities, particularly in social media and data analytics. In these fields, 14% of marketers say that they are involved in digital marketing much more according to the same study. However, even if the importance of digital marketing has increased rapidly and appears to be crucial for most of the European marketers and companies, it is still being developed and there is a lack of performance, meaning that its efficiency has not reached its full potential. Digital marketing is still facing certain challenges, which prevents it to be as mature as in the United States, for example. Thus, in 2015 the revenue of digital advertising in the European market represents 41 billion of US Dollars, while in the United States it accounts for 63 billion of USD [19]. Nevertheless, Europeans marketers are aware of this shift in their practices, 75% of them expect their role will change within the next 3 years and 54% in the next 12 months [19]. This numbers provide for further development of digital marketing in the following years, even if this awareness is greater among the American marketers (81% expect a change within 3 years and 64% within 12 months). The European market is quite different from the American market, as it is not uniform. Digital marketing and the internet penetration in general developed differently in the European nations. For example in Germany and France the digital market is well established, while in some other
European countries, such as Poland or Spain, where the digital landscape is just taking shape [24]. Finally, one of the problems of most of European companies is their ability to measure the return on investment from their digital marketing strategy. Companies wish to have more transparency on digital spending in order to understand exactly what their benefits are [22].

The European Union is facing many challenges in the development of digital marketing. Some of the challenges are slowing down the spread of digital marketing in some companies. Not all marketers are ready to undertake the related risks associated with incorporating the digital marketing strategies in their daily operations. There is also observed a lack of marketing expertise and tools necessary to incorporate digital marketing. Most companies are open to use of new technology but often do not have a vision on how to capitalize on it. In European Union 73% of marketers recognize a need of reinvention but only 30% really want to change [19], the majority want to continue with their old way in order to avoid risks. Compared to European, American marketers are much more confident, 84% of them are ready to adapt to change while only 73% of Europeans are ready to do so. One of the reasons of this distrust in Europe seems to be organizational. Indeed, marketers can’t change all their habits and practices without the support of their companies, they are not acting alone, their practices are dependent on many decisions of their employers. That is why 58% of European marketers think that digital marketing success is dependent on organizational change [19]. The changes of marketers’ practices is related to the budgets of their companies allocated on new technologies, the acceptance by companies to try new things, the trainings in new technology that firms allow marketers to perform or not, and many other criteria. Change can only happen if the whole company is ready to enter the digital field. Besides, companies often times lack relevant tools to get the most out of their digital marketing. Even the businesses which change their mindset to digital face obstacles. Their implemented processes are often difficult to measure and they are unable to test their digital strategy which leads to lower benefits. According to research led by PAC, a consulting firm for software, IT services and digital transformation industry, 21% of firms completely lack a digital testing strategy, 35% are planning to have one within 12 months, when only 18% have fully implemented their testing strategy [21].

The Nordic nations lead the way with digital marketing implementation with 88% of monitor end user experience and user feedback, whilst France lags behind by 23%, according to the same study published in October 2015. The UK is slightly above average for the continent, with one-quarter businesses having implemented their digital testing strategy, yet there is still a long way to go. Only 34% of UK companies test digital apps in production, compared to a rate of 65% in Germany. Finally, the main challenge Europeans face in digital marketing are their own mindset and fear of change. For the future, they need to evolve, reorient themselves, take risks and develop an overall testing strategy to make the best use out of digital technology. Apart from challenges, there are also opportunities. The booming sector of social networks gives companies ample opportunities to implement digital marketing. Indeed, the use of internet is now widely subordinate to social networks.
Internet Marketing Growth Potential: Comparative Analysis for Global Markets

and it’s really easy for businesses to take advantage of the social networks. For instance, the automobile brand Rolls Royce has started up on social networks only in 2014 [29] but their accounts are already followed by millions of people. Another opportunity for digital marketing in Europe is the current economic crisis. As the economy is at a low and people need to save money, they are likely to spend it on-line where the prices are lower. A simple content strategy can be effective, which means that businesses just have to take care of the content of their website, how it is presented, what products are offered, make updates as often as possible and so on. A new consumption pattern could be observed in crisis times which is reoriented towards digital. In France, with this new pattern of consumption, people order all their items on the internet website of the chosen retailer and when they go to pick them up it’s already ready and waiting for them. This technique has developed rapidly due to the crisis and to the development of internet; it allowed retailers to orient the digital marketing strategy towards shopping choices. One of the leaders of this market is Auchan Drive [7], but generally all the French retailers follow this strategy one way or another. Another example is Carrefour Drive [9], which takes the best of content marketing with their tab recipe, the customer can search the meal to prepare, the company then offers a recipe and in one click all the needed ingredients could be purchased. Finally, one of the best opportunities for European companies on the internet is the common currency. As all the European nations are using the Euro, it is often times easier to sell to another market than in their domestic market. Taking this into account, the European internet market is one of the largest in the world offering almost unlimited opportunities.

The European market is really important as it unites 28 nations, amongst which 315 million people are using internet everyday. According to the European Commission [45], the digital market today is made up by national online services at 42% as the EU cross-border online services represents only 4%.

With a much more significant part of the cross-border services, Europe can benefit a lot. That is why the main prospect for the European digital market is a uniform digital market. This could promote Europe as a world leader in the digital economy. The goal of the European Commission in creating this single digital market is to improve growth (415 billion additional revenue) and to create new jobs (hundreds of thousands of new jobs across the EU nations) across the EU countries. European population as well as companies could benefit a lot from this single market as it would allow a better access to goods and services across Europe. As the consumers will be able to choose their goods in different countries, they will be able to save money (11,7 billion € per year) compared to now, where they are obliged to buy on their domestic market. Moreover, this single market will lead to strong European rules, which will protect more customers than the one each nation currently has. Countries that are lagging behind with digital transformation could also benefit from this harmonization of the markets. Indeed, it can improve their regulation related to the internet as well as promote the 4G technology. Finally, this one single market could help reducing gaps between the European nations in the IT fields.
At last, this single market will create a European digital economy with a significant growth potential. According to European Commission, by 2020 big data analytics could boost EU economic growth by an additional 1.9%, equaling a GDP increase of 206 billion €.

3. Comparative findings for the three markets of the US, Russia and France

Graphically the comparative findings for the three markets of the US, Russia and France and presented in Fig. 1, 2 and 3. The data for analysis was used from the resource Digital, Social and Mobile Worldwide [27].

**Figure 1.** Annual growth in the number of active internet users & social media accounts for the US, Russia and France

![Bar chart showing annual growth in the number of active internet users and social media accounts for the US, Russia, and France.](chart1.png)

It is clear from Fig. 1 that Russia represents the highest growth rate both in the number of active internet users and growth in active social media accounts (15% and 10% respectively). The US comes second with 10% growth in the number of active internet users with France displaying only a 2% growth rate. However, France comes second with 7% growth in active social media accounts, whereas in the US the growth is only 4%.

**Figure 2.** Percent of on-line purchases via PC and via mobile phone in the US, Russia and France

![Bar chart showing percent of on-line purchases via PC and mobile phone for the US, Russia, and France.](chart2.png)
The reverse trend could be observed for Russia when examining the e-commerce percentage by device: Russia displays the lowest percentage of on-line purchases via PC and mobile phone (30% and 8% respectively), the US displays the highest numbers of 56% and 18% respectively and France comes second with 49% and 12%. The same behavior could be observed when the penetration rate is plotted in Fig. 3: Russia displays the lowest values for almost all categories that were analyzed: internet users as percentage of the total population displays penetration rate of 60%; active social media accounts show 46% penetration rate, mobile internet users represent 33% penetration rate and active social media accounts display 26% penetration rate. America as in the previous case has the leading role with the highest values of 87%, 58%, 53% and 50% respectively. France as before is in the middle with penetration of 84%, 45%, 45% and 36% respectively.

**Figure 3.** E-marketing data for the US, Russia and France

We can conclude that Russia displays the highest potential for e-marketing, as it the most underdeveloped but at the same time displays the highest growth rates in e-commerce for all devices and shows the highest growth in active internet users and social media account segments. The deteriorating economic situation in Russia will only increase growth and opportunities in e-marketing in Russia, as the population with plummeting incomes will continue to use internet more and more to buy on-line in order to save money.

Fig. 4 presents the strategic effects associated with transition towards utilization of the electronic on-line sales and promotional channels. The effects were investigated and measured for a selected set of large corporations present on the Russian and Western markets.
Figure 4. Traditional (on-site, off-line) and electronic (on-line) sales and promotional strategy adoption matrix.

The circles presented in Fig. 4 are proportional to the revenue in mln. of USD. For the Aeroflot company the adoption of the on-site sales and on-line promotional strategy by 2013 (quadrant 2) from on-site sales and off-line promotional strategy in 2008 (quadrant 4) led to 33.75% growth in revenue. For Azimut company the adoption of the on-line sales and on-line promotional strategy by 2014 (quadrant 1) from on-site sales and off-line promotional strategy (quadrant 4) led to 119.4% growth in revenue. The adoption of the on-line sales and on-line promotional strategy by 2014 (quadrant 1) for Intercontinental Hotels Group and Marriott Corporation from on-line sales and off-line promotional strategy in 2008 (quadrant 3) led to 52.5% and 109.7% growth in revenue respectively.

Conclusions

Based on the findings, internet marketing represents a huge potential for local enterprises and companies involved in international marketing. The three main markets of the United States, Russian Federation and the European Union (France used as an example) were evaluated based upon their developments and potential for digital marketing expansion. It is obvious that the US has the most advanced and developed market for digital marketing with the highest level of confidence in it and readiness to adapt. At the same time the competition in the US is rather high – the highest among the three markets,
which makes it rather difficult for newcomers to succeed. The European market has significant potential being on the path to the single digital landscape which offers enormous opportunities, however it is also rather competitive, though the level of competition and confidence in the digital marketing is lower than that of the US. Finally, Russia, with its huge potential and almost absent competition seems to offer the highest growth potential compared to the US and the European market. However, the risks of investing into digital marketing have to be carefully considered and the differences of Russian culture and mentality must be taken into account in order to be successful.

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ONLINE SOURCES


Study of Innovation Ecosystem: Comparative Analysis of Approaches in Cross-National Perspective

The comparative analysis of cutting-edge approaches for studying innovations in cross-national perspective is conducted. The main problems of investigation of innovations from theoretical and practical points of view are considered. As a result, the author proposes the hybrid model for analysis of innovation ecosystem in the cross-national perspective.

Introduction

Nowadays innovations are discussed as an important phenomenon on different spheres: academia, political and business. However the more innovations are considered the more questions are arisen. In this text a hybrid model for analytical capturing static and dynamic depiction of innovation ecosystem is proposed. Moreover the governments of countries are questioned about the stimulating innovations as one of the driver of economics.

For this reason in the very beginning we make short observation of conceptualization of innovation and innovation ecosystem. Then the hybrid model is described with application to the primary and secondary data for the cross-national perspective.

It was supposed that structure of components and subcomponents of innovations ecosystem by itself doesn’t allow explaining why innovations are succeed or failed on the national and company’s level. The performance of innovation ecosystem depends on efficiency of negotiation of key stakeholders taking into account of impact of components of innovation environment (such subcomponents as society, culture etc). The more fruitful negotiation, the more innovation environment is developed.

At the present moment there is no one common concept of innovations and system of measurement of innovation actives of companies both in practice and academic discourse.

The several sources of understanding of innovations can be depicted.
The first group is presented by legal normative documents at the international, national and local levels. For instance, “The Model Innovation Code for the CIS”, “The Strategy for the Innovation Development of the Russian Federation until 2020” implemented in Russia.

The next type is related to the different types of methodological recommendations as the basis for monitoring innovation ecosystem in the cross-national perspective, for example, Oslo Manual [Oslo Manual, 2005] and “Bridging the Innovation Gap in Russia”, “Measuring Design and its Role in Innovation” [Bridging …, 2001; Galindo-Rueda, F. and Millot V., 2015].

The last one is based on the business practice company perspective. This point is especially important for collecting the empirical data. Thus innovation organizations can elaborate their conceptualization of innovations which is not directly correlated with scholars' operationalization.

The materials for studying innovations can be expanded depending on the research purpose.

**Literature review**

Further, we’ll focus on literature observation on innovations. First of all, it has been underlined that basing on analysis of literature on management, human resource management has a special meaning in the general system of management in innovation-driven companies. Besides this, for development of innovations networks play important role along with communication for elaborating these links “<…> knowledge sharing and the horizontal coordination based on it are often informal and based on verbal communications (even tacit understanding)” [Nambison S. and Sawhney M., 2011, p.10; Aoki M., 1990]. Additionally, modern companies have tendency to shift from firm-centric innovation to network-centric innovation concept [Nambison S. and Sawhney M., 2011]. Thus networks and communications have important meaning for inciting to efficient performance in innovation companies [Kovaleva A., Platonov V., 2010].

Innovations per se are the strong competitive advantage of company. Though examining companies that operate within the framework of one country, the same institutions, the main point is to understand a secret of performance of innovative activity of company. In other words, latent company’s know-how that are not explicited to others: “an institution is self-sustaining, salient patterns of social interactions, as represented by meaningful rules that every agent knows and are incorporated as agents’ shared beliefs about how the game is played and to be played” [Aoki M., 2007, p. 6].

According to this, the elaborated hybrid model is based on two theoretical approaches: institutional where institutions are considered “as the common knowledge of ‘salient features’ of repeatedly played games without making a distinction between operational and rule-making institutions”[Aoki M., 2007, p. 26]. The second one is the
resource-based view (RBV) according to which a firm is considered as a bundle of resources (or tangible and intangible assets) [Grant M. Robert, 1991].

Various types of models of innovation system are designed by researches, but they don’t take into account the detailed complicity of innovation ecosystem. For example, Kudryavtceva S. proposes a model of innovation economy putting in the core such actors as university and R&D structures underlining significance of intellectual capital [Kudryavtceva S., 2015].

Then we’ll describe the hybrid model in more detail examining the complicity of innovation as phenomenon.

The hybrid model

Innovations by itself have unstable nature. In other words, innovations have to be up-dated and market-demanded. However, on the one hand, there is a gap between supply/demand schema of commodity positioning (in some cases, innovative ideas failed in the market especially on the phase of start-up). On the other hand, there are companies with the established flexible horizontal and vertical communications with inside and outside stakeholders, including shareholders.

So, it can be presupposed that companies with efficient horizontal and vertical communications inside and outside of the organization are more innovative than other ones because in the process of elaborating innovations knowledge sharing and data rate (time) are crucial features.

The proposed hybrid model allows capturing two perspectives simultaneously: external (as hard components) and internal environment of company (as soft components) of innovation ecosystem. Additionally there is the third group of components (C) as intermediate.

In two blocks of components H and S different stakeholders are described. The third block C as intermediate is presented by subcomponents of innovation ecosystem that impact on both external and internal environment of company.

The idea is to underline the importance of revealing the key stakeholders as representatives of hard, soft components and subcomponents. The components as companies (market), government, academia and company itself are vague phenomena and if they are considered separately it’s not possible to explain failures and successes of innovations on the level of companies, markets or economy. That’s why this qualitative model proposes to reveal the main stakeholders in every component and subcomponent, to evaluate their weight in decision making process in communication with other stakeholders for development of innovations.

Importantly, the list of components, subcomponents and stakeholders can be modified for research purpose. For example, a circle of subcomponents and stakeholders on regional level differ from the national one.

Further we consider the all three groups consecutively.
The first group “hard components” (H) refers to external environment of company. This H group consists of main components such as companies in the market (local, national or global level), government (government policy on innovation; science and technology policy etc), academia (educational system: schools, colleges, universities, science schools, advanced courses for adults etc). Depending on the focus of analysis, additional components can be added such as venture capitalists, non-government organizations etc.

The next group “soft components” (S) falls into category “internal environment of company”. Internal environment of a company is presented by three different levels of analysis based on the model of analytical structure of resource-based view (elaborated on the model of Platonov Vladimir, Karlik Alexander and Eliseeva Irina) [Karlik A., Platonov V., 2013; Eliseeva I., Platonov V., 2014]. Let’s consider this group minutely. Innovation policy of company is considered from capability of realization of potential. At the same time this potential consists of two types: static and dynamic. The first one includes resources in operating activities (material and non-material) and correlates with them through technologies (production and management) and organizational skills and competencies (such as technical and managerial). The dynamic potential of a company in turn is divided into two parts: resources in investment and innovation activities based on technologies (any new training, R&D or construction) and dynamic skills. Isolating mechanisms allow to company to keep their know-how and make her different from other organizations [Eliseeva I., Platonov V., 2014].

The last group of subcomponents (C) refers to special types of components that can be embedded simultaneously to both types of environment of company: society, culture, business practices etc. (for instance, attitude to innovations) and at the same time on will of employees to propose new ideas, to be ready for changes etc.

The abovementioned description defines only static picture of the model of innovation ecosystem and answer to the question “what”. However it’s crucial to understand the causes of various level of development of innovations environment in cross-national perspective. In other words, it’s necessary to answer to a question “why” innovations are developed differently on the level on regions, companies in different countries. For this reason, the dynamic picture is proposed in the hybrid model (picture 1).

It was supposed that the external and internal environment of company by itself doesn’t guarantee boosting of innovations. The key factor of development of innovations is efficient communication among actors as stakeholders. Negotiations among participants of innovation ecosystem make the components alive and all innovation ecosystem, in the whole. Moreover, communication failures between stakeholders lead to shortcomings in improvement of innovation ecosystem.

The possible ways of communication are marked by arrows on the schema of the hybrid model. The arrows are divided into two categories: one side and two sided arrows that indicate ways of directions of communication such as one- or two-way.
Thus dynamic perspective of the model is focused on disclosing the communication between stakeholders and nature of noises during interaction, identifying their interests, describing process of making decision. Additionally, another important measure is management of these types of tensions for smoothing collaboration.

Furthermore, impact of each stakeholder and subcomponents can be evaluated using a weight basing on primary and secondary data using analytical scale.

**Picture 1 – Hybrid model of innovation ecosystem**

![Hybrid model of innovation ecosystem]

<table>
<thead>
<tr>
<th>H1</th>
<th>Companies</th>
<th>H1 stakeholder 1</th>
<th>H1 stakeholder n</th>
<th>S1</th>
<th>Management system of company</th>
<th>S1 stakeholder 1</th>
<th>S1 stakeholder n</th>
<th>Potential (static and dynamic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>Government</td>
<td>H2 stakeholder 1</td>
<td>H2 stakeholder n</td>
<td>S2</td>
<td>Groups</td>
<td>S2 stakeholder 1</td>
<td>S2 stakeholder n</td>
<td>Resources and capacities</td>
</tr>
<tr>
<td>H3</td>
<td>Academia</td>
<td>H3 stakeholder 1</td>
<td>H3 stakeholder n</td>
<td>S3</td>
<td>Individuals</td>
<td>S3 stakeholder 1</td>
<td>S3 stakeholder n</td>
<td>Technologies and competencies</td>
</tr>
<tr>
<td>H4</td>
<td>Component N</td>
<td>H4 stakeholder 1</td>
<td>H4 stakeholder n</td>
<td>C</td>
<td>Subcomponent 1 (society)</td>
<td></td>
<td></td>
<td>Isolating mechanisms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C</td>
<td>Subcomponent 2 (culture – mental peculiarities)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C</td>
<td>Subcomponent N</td>
<td></td>
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</tr>
</tbody>
</table>

*Source: prepared by the author.*

The hybrid model can be applied for studying innovations on the national and local levels in cross-national perspective identifying stakeholders and their weight in each considered cases.

**Conclusion**

In summary, we discuss the debatable questions regarding the hybrid model.

Firstly, components and subcomponents with their weights are not balanced in external and internal environment of company and seem to be in some cases incomparable.

Secondly, stakeholders have different weight and not always are ready to disclosure the problems in negotiation on innovations.

In the whole, combining primary and secondary data for each case (country, sector of economy etc) allows to understand the routes of success and failure of innovations. In
short, it can be developed the model for efficient development of innovations for particular cases that increase the level of performance of innovations in practice.

As result, the elaborated hybrid model can be submitted for comparative studies of innovations in different countries and for research this issue on different levels, for instance, to compare the innovative-driven companies on the level of company or country.

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The Problems of Functioning and Development of the Regional Banks in the Conditions of Transformation of the Russian Economy

The article deals with the problems of functioning and development of regional banks in the conditions of transformation of the Russian economy. This topic is particularly relevant in the light of the main trends of development of the banking sector in the context of growing financial turbulence in the country and in the world. Enhancing the role of regional banks dictates the needs of the expanded reproduction of transformation of the economy and especially of its development, not only related to the regionalization of the country, its economic development imbalances, and clustering tendencies of the national economy; especially property relations; specificity of activity of regional banks due oriented development of the region in which these banks operate; strong structuring of banks in the banking system, reflected in the dominance of very large banks and the presence of a fairly large number of so-called “small” banks.

Nowadays banks keep their significant purpose related to economy development. Accumulating their financial capital, concentrating their direction and diversifying the risks, they create the essential background to extend and speed up the pace of production. Being a part of the general economic body, banks showing their dependency on the economic situation, in their turn, have their direct effect on it. The way of develop-
ment, as well as the financial status of banks mainly influence the sustainable development of the actual economy sector. In terms of financial problems they can either assist in economic and social progress, or result in breaking the economic balance, becoming a “trigger” for crisis events.

The issues of place or role of banks in the reproduction process are being surveyed for a long time in the economic literature. The successors of neoclassical school, who established the theoretical base stated that it is necessary to carry out a more thorough survey of market balance conditions, study of functional connections method in financial-credit relations. The representatives of Keynesian theory in their works did not cast into any big role of bank sector and its effect on reproduction processes, giving their preferences to production process investigation. They considered the increase of governmental costs and investments as a basis for economic growth instead of activities of bank bodies or institutions.

New trends in development and change of bank capital in reproduction processes were stated by the representatives of institutional school. However, the classicists of institutionalism assessed the bank capital to be parasitic and did not admit any positive influence of banks on the reproduction process. Neoinstitutionalists in their books accepted possible and necessary governmental impact on monetary, financial and credit institutions, and banking was studied using such terms as “consumption”, “usefulness” and “alternative costs”.

However the standard provisions in the contemporary institutional-evolutional theory were based on acceptance of the increasing role of banks in the economic development. J. Schumpeter contributed a lot in that, proving that it is not reasonable to consider the bank activities only as a technical function of monetary mediation of exchange acts.

Normally, the economic literature defines a region as a part of country, location, district, which is characterized by its economic, geographical or any other particulars, often combined with specific features of the national population. The common aspect combining all available definitions is that the region is interpreted as a part separated from a general unit, identified according to its certain features: specific field, completeness of reproduction cycle, environmental and climatic, cultural and national, social and economic, political, administrative and other significant factors [15, 5 p.].

However the regional boundaries are relatively vague – if the location’s scale is limited to a territorial entity of the Russian Federation, domestic regulation of economic, financial or other relations will be also held by the regulatory system applicable to local conditions; if the regional scale includes several entities of the Russian Federation, then the relations regulation will be held at the level of inter-entity agreements and current legislative acts.

Regional nature of the Russian bank sector is primarily connected with the territorial entities of the Russian Federation, each of them having all regional features, therefore the term of a region is more reasonable to associate with the territory of the entity
of the Russian Federation (however the cities of Moscow and Saint Petersburg being separate entities of the Russian Federation can also be defined as regions). Therefore, it is interpretation of a region as an entity of the Russian Federation that specifies the limits of its banking sector.

Normally regional banks mean so called “local”, small banks. For example, according to O.I. Lavrushin’s theory, regional banks constitute the ones that mainly service the local clients of a certain region, as well as municipal banks meeting the demands of a certain city or town.

Similar to the legally set term of a small business, scientist E.V. Tikhomirova offers to set forth the status of a small bank, specifying the parameters of its operations, so that small banks could have all conditions for their existence.

The Bank of Russia in its annual reports relates all credit organizations “registered outside Moscow and the Moscow region” to the regional banks [55]. A number of authors offer the “regional nature” of bank to be defined by its contribution to the regional economy.

According to the detailed classification of bank groups, prepared by the Economic Research Centre under the Moscow Financial and Industrial Academy, the banks with their own budget amounting from 180 mln. rub. up to 300 mln. rub. are related to small banks [8, 35 p.].

It is also important to mention another definition of a regional bank, often met in the West European banking literature, specifying regional banks as the ones with the assets not exceeding 1 bln.USD, which provide their services for small and medium-size local enterprises. In that case the main criterion is the capital size and customer list. It would not be also correct to relate banks to the regional bank category using the above features, since either large, medium-size or small banks can actively participate in the regional market of bank services, playing an important role not only in the bank system, but also in the social and economic life of the region.

When defining the concept of a regional bank, it is not the funds size, but the source of its formation that is more important, since originally the main goal when establishing the regional banks shall be ability to meet the main demands of the regional economy, while mainly it is only local enterprises and banks themselves that are interested in economic development of the region.

Some Russian scientists find the major share of stock held by the local administrative authorities as a defining criterion, considering that it is exactly the factor that specifies the business line, role and distinctive features of the regional bank. Certainly participation of local administrations substantially effects the development of regional banks, as it is regional authorities that have always supported and saved these banks, however it “cannot be the only criterion to define the category of a regional bank” [11, 8 p.].

Professor G.N. Beloglazova separates two groups among regional banks: credit organizations, directly or indirectly controlled by executive bodies of the Federation subjects; the banks controlled by private funds.
The first group of banks is actively used by the local administrative authorities in order to implement the investment projects, settle the issues related to local industry support etc. Availability of banks controlled by the executive body of the Federation entity makes it easier for the authorities to solve many economic and social problems – from credit support for regional system forming enterprises up to residential construction stimulation. The second group includes private regional banks, which mainly service local small and medium-size business and render simple services to the population. These banks, well familiar with the demands of their customers and local market conditions, are able to consecutively put into practice the client-focused strategy in their activities. “They can faster adjust themselves to regional features and interests of a particular customer” [4, 35 p.].

One of the advantages of small banks is a simple structure of management that does not require large investments for its support. Regional credit organizations provide conditions for stable development of the regional economy and its protection against crisis breakdowns. In case of aggravation of the economic situation the majority of federal banks direct the liquidity to head structures, while local credit organizations “save” their customers.

Scientists I.N. Rykova and E.V. Andreyanova, systemizing approaches to definition of the nature of regional bank, specify four main approaches to its definition: client focused approach – when the bank operates solely in a certain region and with the clients from that region only; founding based approach – i.e. founded by regional authorities and renders services to them; statistic and administrative approach – i.e. the banks are registered in the Federation entity; the approach based on the bank importance for a certain region [2, 13].

In the meantime they find the above approaches to be ambiguous and controversial, offering additional features, that help to define the regional bank as an organization with their funds formed by concentration of the regional economic resources, which deals with special financial and intermediary operations in the region in order to develop its economy, which depends on financial status of legal and physical entities of that region. [14, 27 p.].

As we see it, this definition is succinct and it points out that it is necessary for the regional bank activities to be focused on the regional economic development, however we find it reasonable to replace the word “organization” in the definition with the word “bank” and it is important to emphasize its head office location in the region [8, 36 p.].

Scientist T.N. Zverkova, defining the term of “regional bank”, draws her particular attention to formulating its mission and strategy, pointing out that already in the very beginning the goals of a particularly regional and efficient “economy participant” shall be reflected in the basis for activities of regional banks”[10, 38 p.]. T.N. Zverkova specifies the regional bank as the bank with its head office located in the region, which is a part of an integral and administrative system of the regional economic structure (posing the key goal of promoting their regional development), and it is mainly the local en-
terprises and governmental authorities that participate in the capital formation of that bank, providing services of a specific cycle of regional economy reproduction by means of rendering bank services and participation in the programs of the regional economic development” [10, 81 p.]

However the specific feature of a regional bank, as we see it, shall not be a matter of the capital value, but rather a matter of the form of capital ownership. Moreover we find it reasonable to replace a term of a “regional bank” in the above mentioned interpretation with a term of a “local bank”.

Transformational period is the time when the society carries out the radical economic, political and social changes, while the economy of the country reaches a new, absolutely different stage. Different authors interpret the transformational period of the economy in several ways – as “dynamic changes in macro economy reflecting the final results of the economic activity and its effect on the other aspects of social life”, a period “ending with the country’s nominal transfer to a new level of sustainable economic growth and stabilization of social and political structures” [17] and so on, however all definitions are finally limited to its interpretation as the reformation of the economic system.

The transformational economy provides for reformation of the system of social and economic relations. Actually transformational economy is the up-to-date development stage of the economic system, characterized by change in the dialectical unity of quantitative features, i.e. proportions and ratios between different economy links, as well as qualitative parameters or nature of connections between economy components, where priorities are moved towards scientific arrangement of the system for establishment and creation of knowledge-based economy. The important specific feature of development is the fact that two types of interrelated global transformational trends take place together with the transformation process – globalization and IT penetration, while the important feature for economy of developed countries is evolutionary transformation of economy influenced by innovative technologies.

Transformation process covers the extractive and raw material industries; process industry; intermediate trade sector; tangible service industry; intangible service industry; IT related industries. The latter separately specified as an independent sector provides for the actual evaluation of the status how far the national economy has moved towards the informational development stage. The economy evolution to post-industrial stage is followed by growth of a number of industries, as well as by changes of their value [16].

Therefore, structural transformation of the economy means reformation of a complicated social and economic system with its separate segments being proportional to each other, closely interconnected, forming the hierarchic dependency. In that system the micro-, meso-, macro- amd megalevels are integrated in the whole entity by means of relations between property and production, market, financial, social and informational infrastructure.

The federal regional policy aims at ensuring the balanced social and economic development of the constituent entities of the Russian Federation, cutting down the level
of the trans-regional differentiation in the social and economic status of regions and quality of life. The Concept of the long-term social and economic development of the Russian Federation to be fulfilled until 2020 provides for more economic independency for the regions, establishment of an efficient tool to unify the budget, bank, domestic and foreign investors’ resources. [8, 30 p.].

Financial and credit tools to implement the social and economic development strategies for the Russian Federation regions is a key subject of many bank forums providing discussions about the issues of improving the Russian banking system, state of the investment and business climate in the Russian regions, price and geographical affordability of banking services. Thus, as a result of the 12th Russian Banking Forum held late August in 2011, the decision was taken to proceed with work on establishment of efficient financial and credit tool to stimulate the economic growth in the regions and under the Ministry of the Economic Development of the Russian Federation to create a Council responsible for research and distribution of the advanced experience of functioning the financial and credit tool with participation of bank and financial association members.

A particular attention is drawn to the establishment of efficient financial and credit tools in the regions to stimulate the economic growth based on the activated participation of regional banks in the economic development of the country. Banking sector and regional economy interact through the economic relations with participation of both all economy industries and economic entities themselves. The importance of the regional banking sector in these relations is connected with accumulation and efficient redistribution of financial resources to provide the continuous production and consumption of goods and services in a separate region and to speed up the general social and economic development process.

It should be mentioned that despite the activities of the regional saving funds, insurance and investment companies, which contribute in redistribution of financial resources of the territory, banks are more valuable, as they focus on financial services not only for the enterprises of the real sector, but also for the institutions related to the financial economy sector.

Hereby, due to bank operations with the funds raised from the enterprises and citizens, financial intermediation, credits and investments, as well as due to the comprehensive servicing the regional economy and all its industries banking sector is the key subject in forming the regional financial base and significantly influences its social and economic development.

To enhance the importance of banking sector in the process of the Russian economy modernization it is required to get rid of disproportions existing in the development of the Russian regions aggravated by unequal distribution of rendered banking services, insufficient development level of financial and credit tool, “forming the competitive environment in the banking sector, represented by a full number of credit and financial institutions – from large banks with governmental participation up to small regional banks” [5, 12 p.].
Based on the international experience, independent credit organizations present in each entity of the Federation is one of the most important conditions for forming the efficient model of budget federalism in the country.

Enhancement of the role of local banks is guided by the demands of expanded reproduction of transformational economy and specific features of its development associated not only with regionalization of our country and disproportions of its economic development, but also with clusterization trends present in the national economy; specific features of property relations; specific features of regional bank activities driven by development direction in the region, where these banks are functioning; by strong structurization of banks in the banking system, presented by the dominating status of large banks and presence of relatively big amount of so-called “small” banks [8, 32 p.].

The nature of geographical distribution of the banking services in the Russian Federation is still inhomogeneous. The Central Federal district is provided with the maximum possible scope of banking services (primarily Moscow), afterwards there follows the North-Western Federal district with high concentration of banking services in Saint Petersburg and the Southern Federal district. The results of 2012 were marked by the growth of the index in question in the Far Eastern, Siberian and Ural Federal districts.

The lowest value of the total banking services availability index for the regions was found in the North Caucasian Federal district, while the lowest level of banking services availability among the Federal entities was shown in the Republics of Dagestan and Ingushetia.

The development of local banks is effectuated by both external (general federal) and internal (regional) factors. As far as external factors are considered, it is primarily macroeconomic factors, monetary and credit policy performed by the government, policy in the banking activities, as well as its legislative and regulatory principles. The following factors are considered as regional factors: economic, social, technological, political factors and competitive environment.

Incomplete institutional transformations related to separation of the regional banks, reduction of their number, setup of the main parameters for the regional bank activities at the federal level, disregard of the role of local banks in the system of regional economic relations significantly make it difficult to develop the regional market of banking products, while the growing client demands make the banks constantly improve their products and flexibly respond to the changing external conditions, at the same time providing themselves with competitive advantages.

Summary

The regional banking sector directly affects the status of the regional economy and the living standard of the population, first of all, providing the economy and population with additional financial means, such as credits and investments, by making continuous
calculations, maintaining the current liquidity of economy and the banking sector itself. Therefore it is of importance to resolve the issue of maintaining the development of all components of the banking structure, particularly of the regional banks, and system stability of the whole regional banking sector.

There is the obvious mutual connection and interdependence of successful development of the banking system and economy, both as separate entities and the country in as a whole. Banks are active participants in top-priority national projects and regional investment programs, both in the industrial and in the social fields.

Demands in extended reproduction of transformational economy, including the regional level, make it necessary to establish, develop and promote a special type of regional banks, focused on economic and social territorial needs.

However a legislative framework for the term of a regional bank or, if to be more precise, a local bank, shall be provided. The term of a local bank means the bank, which is a component of financial and credit mechanism of an integral administrative system of the regional economic complex, where the capital is mainly formed by local enterprises and government authorities, with the main goal of promoting the development of its region, stimulating its economic growth and determining its development strategy considering its features, which deals with servicing a specific cycle of the regional economic reproduction by rendering banking servicing and participating in comprehensive programs of the regional economic development.

The problems of the local banks to achieve their role become particularly acute against the background of the current economic situation in the country. Thus, a complex of macroeconomic values as a result of 2013 shows the actual stagnation of the Russian economy. GDP grew by only 1,3%, industrial sector, investments were suspended, with the inflation rate speeded up. The situation deteriorated in 2014, when certain negative aspects in the domestic credit and industrial policy of the country were aggravated by external “shocks”.

When forming the adequate architecture of the banking market in that situation, it is important to take into consideration the lessons of evolution of regional banks in Russia, as well as the foreign expertise of regional credit institutions functioning in the countries with the well developed economy.

Solving new issues under conditions of inevitable changes in the financial system priorities make it necessary to come up with a concept of local bank development, aimed at stimulation of the economic development of territories and performance of social tasks.

Bibliography


Planning as a fundamental management process function is gradually becoming to be one of the major management activities undertaken by Local Government Units (LGUs). All LGUs create their annual budgets and develop multi-annual financial plans. The objective of the paper is to present the factors which impact effective LGU financial planning – in a multi-year as well as an annual perspective – and which contribute to a more effective use of public funds, thus facilitating a better communication between local governments and local communities by presenting the transparent plans of long-term undertakings, the sources of funding, and the targets to be achieved.

Key words: multi-year planning, annual planning, financial management

1. Introduction

Local Government Units (LGUs) are increasingly engaged in management activities aimed to achieve their long-term objectives in an effective and economically viable manner. It requires an integrated approach to LGU management and the preparation of documents which set a local community’s major objectives, as well as the implementation processes enabling all the engaged entities to make the best use of their cooperation opportunities. It allows LGUs to effectively use their available resources, leading to greater effectiveness, eliminating unnecessary activities (waste of resources), and the choice of the most effective ways of dealing with problems [see: Budżet 2000, p. 10].

M. Dylewski [2007] states that managing an LGU as an organization involves fundamental management functions including planning, coordinating, organizing, controlling and making improvements in the process of performing tasks, as well as leading and motivating employees.
Planning as a fundamental management process function is becoming an increasingly important part of LGU management, focusing on creating a desirable image of the future and identifying the most efficient ways of achieving this image. It is a continuous process of asking questions related to the projected status of a given organization, its environment, and the whole economic system. In accordance with the management process cycle, planning is an element which initiates the entire management mechanism [see: Dylewski 2007, p. 60].

The paper presents the principles and practices of financial management in LGUs. The increasing significance of financial management in LGUs results from external demographic, economic and social factors, as well as from globalization processes, which have an adverse impact on LGU activities, especially with regard to their financial condition and development opportunities [see: Surowka 2016, Szewczuk 2016, Jastrzębska 2016, Czekaj 2014]. Moreover, the obligation to prepare multi-year financial forecasts (WPrF)¹ by LGUs, along with new debt management regulations [Public Finance Act of 27 August 2009 (hereinafter PFA) [Journal of Laws 2013, item 885 with later amendments], are characterized by a number of structural deficiencies, and criticised by some authors as an attempt to create a new Weber’s concept of public administration in Poland [Salachna 2016, Wyszkowska and Wyszkowski 2016].

The paper presents multi-year financial forecasts and annual budgets as effective tools for LGU financial management. Also, it describes mutual relations between LGU multi-year and annual planning processes.

2. Multi-year financial planning

Multi-year financial planning is a process aimed to identify LGU long-term financial potential. It allows for presenting the variants of future LGU revenue and expenditure, and surplus/deficit projections, i.e. the factors which determine the sources of external financing (loans) and the resulting and projected related costs. A multi-year financial plan is based on long-term financial planning and an analysis of the various plans of financing LGU strategic development plans. The Multi-Year Financial Plan is a tool for the rational management of public funds, and debt management constitutes its integral part. K. Cichocki [2001] defines the characteristics of multi-year financial plans:

- a multi-year perspective of planning investment and operating tasks,
- the completeness of budget implementing plans and the plans of all entities providing services for inhabitants, regardless of their organizational form,
- management effectiveness; the governing principle in preparing multi-year financial plans is effective planning and managing own resources and debt,

¹ Methodologically, multi-year financial forecasts are the equivalents of multi-year financial planning. They became mandatory in 2011, pursuant to Art. 226 of the Act on Public Finance (Journal of Laws of 27 August 2009, Journal of Laws of 2013, item 885 with later amendments.). The paper distinguishes between multi-year financial plans as one of LGU integrated planning and management techniques and the provisions of the Act itself.
- inhabitants’ participation in LGU management; the performance of tasks and objectives are consulted with and assessed by inhabitants.

Also, the author identifies three pillars of appropriate multi-year financial plans: 1) complete, transparent and reliable financial reporting; 2) reliable budget forecasts including revenues, expenditures and debt and its servicing, and 3) the acquisition of low cost funding for financing multi-year infrastructure projects [Cichocki 2001, pp. 10–11]. Literatures stress the significance of multi-year financial plans as a tool for improving budget allocations, and an integral part of LGU development strategies.

Multi-year financial planning can be identified with strategic planning in companies and other organizations, and should be an integral part of managing public entities. Therefore, it should give consideration to financial and resource-related constraints, the conflicting interests of various groups (affecting an entity’s functioning), insufficient information at the stage of developing plans, and predicted changes in the business environment. Also, the multi-year financial planning process must be coherently combined with other planning documents prepared by LGUs (internal coherence and compliance). [Wyszkowska and Wyszkowski 2016, pp. 14–15].

Multi-year financial planning is one of a number of complementary methods under the framework of integrated LGU management, and apart from the planning process itself it includes the methodology of multi-year investment planning, task based budgeting, and the development of LGU strategies and sectoral policies. There are a number of correlations between multi-year financial planning and the above mentioned techniques. To ensure the greatest possible effectiveness of activities, it is advisable to identify these techniques and apply them in the decision-making process. An analysis should give special attention to relationships between multi-year financial planning, which plays the role of a multi-year forecast, and annual task based planning in which tasks are achievable and clearly defined, which results from the methodology of task based budgeting, determined by service unit costs and other parameters including the scope of tasks along with measuring tools. K. Cichocki stresses that the process of developing multi-year financial plans is based on effectiveness estimates, calculated with the use of task based budgeting models, investment preparation activities, and restructuring. Moreover, the process identifies the sources of investment funding in accordance with multi-year financial planning, with special attention given to priority investment projects. [2001, p. 11].

A multi-year financial plan is a basis for developing accurate revenue and expenditure forecasts, including the calculation of disposable investment resources for financing investments’ projects in particular years. It also facilitates LGU financial planning and its adjustment to liquidity and appropriate debt levels.

The LGU debt management process is based on determining an LGU’s credit worthiness, safe debt levels, as well as the most effective and cautious use of the sources

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2 Gross disposable funds are defined as the difference between an LGU’s total budgetary receipts and current expenditures. Net disposable funds = gross disposable funds less debt service expenses.
of financial markets, the identification of financial risks, and the effective monitoring of principal and interest repayments. Also, the process requires LGUs to improve their cash management methods (predicting cash flow disturbances), and involves maximising capital interest income [see: Cichocki 2001, p. 14]. Multi-year financial planning, including its integral part – debt and repayment forecasts, is (apart from a budget) the most significant document of financial planning. Debt forecasts, on the other hand, provide insights into the quality of LGU multi-year financial planning. In the first place, they should account for all the forms of debt financing. When a forecast is only based on the current debt, or when it covers the period of less than 7 years, multi-year planning cannot be effective, and, in particular, it does not facilitate the planning of long-term investment projects [see: Cichocki, 2013].

One of the major objectives of the adopted debt policy is the responsible and reliable determination of optimal debt levels. B. Nawrocki [2016, p. 27] defines optimal debt levels as those at which debt is due before the necessity arises to recover LGU assets, allowing for ensuring appropriate budgetary liquidity in the predicted period and an LGU’s credit worthiness, preventing the threat of debt traps. Indebtedness, as defined above, allows for identifying the scale of viable investment projects [also see: Jastrzębska 2016]. The determination of optimal debt levels on the basis of multi-year planning policies becomes an issue of key significance when new opportunities arise for debt limit exemptions (under the existing system of local government debt limits) as well as off-balance sheet investment financing instruments outside of the limit system. The reliability and assessment of the viability of multi-year financial plans, including the determination of optimal debt levels, rely heavily on appropriate current revenue and expenditure estimates (especially proceeds from disposal of assets), affecting an LGU’s adopted guidelines and development policies.

– The extent to which multi-year financial planning can act as a strategic planning instrument depends on its structure as well as the methodology of its development. J. Salachna [2015, p. 63] points out that multi-annual strategic planning should include at least the following stages:

– an analysis of priorities, focused on the expectations of stakeholders (local government community) and an organization’s mission (major LGU tasks),

– the choice of an optimal strategy (depending on the current conditions), based on the available options,

– strategy implementation, including the planning of necessary resources as well as possible changes to organizational structures or control systems for implementing an adopted strategy.

A multi-year financial forecast can be a management tool provided that it has the characteristics of a strategy and includes the above mentioned stages. An analysis of current requirements related to multi-year financial forecasts, especially the nature of the debt ratio, along with numerous exemptions, off-balance sheet investment financing instruments, and, finally, planning periods of several dozen years indicate that a multi-year finan-
cial forecast cannot be treated as a reliable forecasting tool [see: Salachna 2015, Tarnowski 2015, Woźniak 2016]. Therefore, it should not be regarded as an effective tool for managing LGU resources. Nevertheless, as B. Filipiak stresses [2016], legislation sets out guidelines for multi-annual planning in Poland, and introduces one of a number of planning instruments enacted by Parliament for managing local government public debt and finance.

Table 1 below presents multi-year forecasts for all LGUs in 2014–2017 from the perspective of basic financial categories: revenue and expenditure, operating surplus (understood as the difference between budgetary current revenue and expenditure), and the planned debt and its dynamics. Table 2 presents figures for 2014 and 2015, related to the basic categories of multi-year financial forecasts, referred to the actual data (based on budgetary reports) and their dynamics. The analysis of the plan and the performance of the particular revenue and expenditure categories, including the key role attributed to operating surplus indicators, indicate a low level of the accuracy of predictions. The planning of such categories as subsidies and income resulting from the disposal of assets, debt servicing, the purchase of shares, investment outlays, or the above mentioned operating surplus is far from being satisfactory.

Table 1. Forecasts for selected financial categories: revenue and expenditure, operating surplus and debt levels for LGUs in 2014–2017 (along with their dynamics)

<table>
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</thead>
<tbody>
<tr>
<td>1. TOTAL REVENUE</td>
<td>198,56</td>
<td>188,99</td>
<td>181,76</td>
<td>182,67</td>
<td>95,18</td>
<td>96,18</td>
<td>100,50</td>
</tr>
<tr>
<td>1.1. Current revenue including:</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>income tax paid by natural persons</td>
<td>34,54</td>
<td>35,38</td>
<td>36,66</td>
<td>37,74</td>
<td>102,43</td>
<td>103,64</td>
<td>102,92</td>
</tr>
<tr>
<td>income tax paid by legal persons</td>
<td>6,42</td>
<td>6,57</td>
<td>6,81</td>
<td>7,01</td>
<td>102,36</td>
<td>103,52</td>
<td>102,94</td>
</tr>
<tr>
<td>property tax</td>
<td>19,41</td>
<td>19,75</td>
<td>20,27</td>
<td>20,63</td>
<td>101,72</td>
<td>102,63</td>
<td>101,78</td>
</tr>
<tr>
<td>general subsidies</td>
<td>50,59</td>
<td>51,16</td>
<td>52,12</td>
<td>52,60</td>
<td>101,14</td>
<td>101,87</td>
<td>100,92</td>
</tr>
<tr>
<td>subsidies and funds for current needs</td>
<td>27,69</td>
<td>23,31</td>
<td>22,49</td>
<td>22,34</td>
<td>84,18</td>
<td>96,46</td>
<td>99,36</td>
</tr>
<tr>
<td>1.2. Investment subsidies and disposal of assets including:</td>
<td>29,21</td>
<td>20,71</td>
<td>11,58</td>
<td>8,83</td>
<td>70,92</td>
<td>55,92</td>
<td>76,24</td>
</tr>
<tr>
<td>disposal of assets</td>
<td>5,67</td>
<td>4,08</td>
<td>3,03</td>
<td>2,31</td>
<td>71,92</td>
<td>74,22</td>
<td>76,46</td>
</tr>
<tr>
<td>investment subsidies</td>
<td>22,72</td>
<td>15,57</td>
<td>7,92</td>
<td>5,93</td>
<td>68,52</td>
<td>50,85</td>
<td>74,93</td>
</tr>
<tr>
<td>2. TOTAL EXPENDITURE</td>
<td>212,74</td>
<td>187,44</td>
<td>177,11</td>
<td>176,77</td>
<td>88,11</td>
<td>94,49</td>
<td>99,81</td>
</tr>
<tr>
<td>2.1. Current expenditure including:</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>current expenditure – sureties and guarantees</td>
<td>0,40</td>
<td>0,58</td>
<td>0,60</td>
<td>0,59</td>
<td>145,48</td>
<td>104,40</td>
<td>97,83</td>
</tr>
<tr>
<td>debt servicing</td>
<td>3,13</td>
<td>3,50</td>
<td>3,38</td>
<td>3,17</td>
<td>111,84</td>
<td>96,81</td>
<td>93,76</td>
</tr>
<tr>
<td>employee compensation and related charges</td>
<td>68,52</td>
<td>67,89</td>
<td>68,73</td>
<td>69,04</td>
<td>99,08</td>
<td>101,24</td>
<td>100,44</td>
</tr>
<tr>
<td>LGU administration expenses</td>
<td>15,06</td>
<td>14,48</td>
<td>14,57</td>
<td>14,44</td>
<td>96,17</td>
<td>100,58</td>
<td>99,12</td>
</tr>
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</table>
If multi-year financial forecasts are to perform the adopted function of financial management tools, the quality of planning (which affects the reliability of data) must be
much higher. This question was addressed by the National Clearing Chamber Council, which referred in its 2015 report to considerable differences between financial forecasts and the implementation of local budgets. Another deficiency is the lack of clear regulatory correlations between multi-year financial forecasts and annual budgets (except the Public Finance Act, Art. 229). Another significant issue is the time framework for developing financial forecasts. The analyses of implementing two-year plans point to considerable deviations, while research studies refer to a number of LGU financial plans developed for time horizons exceeding 40 years.

3. Annual planning

An LGU’s budget is a major tool for managing its finances, and as an annual financial plan which reflects its policies for managing available resources, it constitutes a basis for decision-making processes and for setting directions for local government activities.

The significance of annual planning and a budget itself is referred to by K. Pakoński [2000], who stresses the role of a budget as a management function, as well as by M. Dylewski [2007], who states that a budget as a financial management tool relates to raising and spending public funds in the most effective way from the economic and social perspective. LGU budgets, owing to differences in their content and adopted methodologies, represent various forms and types, which confirms their usefulness in LGU management.

According to the Public Finance Act, an annual budget is an annual plan of an LGU’s revenue and expenditure. Apart from the above information, a budget also identifies the sources of financing a deficit and sets directions for managing a financial surplus.

A local government budget is a general fund. More effective management and planning processes are facilitated by the division of a budget into its current and investment components. This division results from a different nature of current expenditure related to satisfying the short-term needs of a local community (one year periods) as compared with investment outlays which may have long-term effects on social life. Therefore, at the stage of preparing a budgetary plan, each type of expenditure is assigned to different sources of revenue [see: Kosek-Wojnar and Surówka 2002, pp. 51–52].

Budget management in a one-year perspective is of key significance not only from the point of view of the performance of tasks, which is reflected in the granting of dis-

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4 Art. 229 provides that values adopted in multi-year financial forecasts and LGU budgets should be consistent at least with regard to budget results and corresponding revenue and expenditure amounts, as well as debt levels [Journal of Laws of 2013, item 885 with later amendments].
charge to an executive body, but also from the perspective of mutual relations between specific budgetary categories which impact the level of gross disposable funds (net funds after deducting debt servicing costs) and which serve as a basis for planning investment tasks [see: Cichocki 2001, p. 30]. Only thoroughly planned budgets can identify opportunities for savings and alternative ways of performing tasks, or ensure the achievement of better productivity and effectiveness ratios. Finally, effective budgets allow for a close monitoring of the outcomes of incurred expenses. Improvements in the methodology of budgetary planning, especially with regard to current expenditure, which – as confirmed by recent research studies – not only rises but also plays the role of fixed expenditure, determining LGUs’ development financing potential, would increase the effectiveness and efficiency of LGU management [see: Filas, Piszczek and Stobnicka 1999, Improving ……1996, Budżet… 2002, Lubińska 2009, Filippiak, Dylewski and Gorzałczyńska-Koczkodaj 2011, Borowik 2013, Piotrowska-Marczak 2013, Poniatowicz 2014]. In practice, considering the existing budgetary structures, in which current expenditure accounts for more than 90% of the total expenditure, improvements in LGUs’ financial standing (and its accurate assessments) could only be made by developing a budget’s task based structure, facilitating time-based comparisons between similar entities from the perspective of the type and economic aspects of their tasks. It would also allow for a more effective allocation of funds and, consequently, the monitoring of the overall costs of tasks. Undoubtedly, the quality of annual planning determines multi-year planning processes. In order to achieve a reliable 5–10 year forecast, it is necessary, in the first place, to develop an annual plan, and then to analyse the budget of the subsequent years. Thus, the accuracy of a forecast is conditioned by estimating an LGU’s revenue potential, identifying revenue and expenditure structures, trends and possible threats, as well as the strengths and weaknesses of LGU-adopted financial policies. A forecast is not a simple reflection of current trends but their extension – it considers new and alternative revenue generation opportunities as well as corresponding expenditure options [Cichocki 2001, p. 31]. Obviously, the opposite approach can be adopted – an LGU’s long-term financial potential is a basis for developing detailed one-year plans of tasks. The annual planning process is initiated by identifying an LGU’s financial potential on the basis of historical data and national and regional macroeconomic trends and forecasts, aimed to develop accurate LGU financial forecasts in such areas as projected revenue (including LGU-planned tax rates and local charges), operating expenses, provisions for debt servicing and repayments, and the level of disposable funds. This provides a basis for preparing planning data for fund administrators or bodies in charge of task implementation processes. Such data include a general description of adopted targets and their implementation, as well as a preliminary allocation of resources to particular projects and tasks, based on the previous experience and guidelines for the coming year, including new tasks [Pakoński 2000].

A task based budget is a perfect tool for developing annual plans, and it can also be used in longer than one-year planning.
A task based budget is an LGU’s financial plan in which the process of projecting expenditures in accordance with the existing budgetary classification is preceded by the preparation of detailed task-related financial plans to be implemented by administration bodies [Pakoński, K. 2000, p. 16].

Budgetary tasks constitute a major component of a budget’s structure; they are internally consistent, and represent relatively uniform activities. The overall costs are then calculated, and responsible people are appointed for the performance of the adopted tasks [Filas and Piszczek 1999].

Task management is frequently compared with project management – tasks are treated as specific projects for which people are appointed and given responsibility for their implementation and financing, time framework, the subsequent stages (if necessary), and, most importantly, the expected outcomes.

The introduction of task based budgets in LGUs as financial management tools can lead to a number of concrete effects including the rational management of funds as well as improvements in the quality of LGU financial management methods. Moreover, a task based budget offers a number of opportunities in terms of performing various functions. It is a tool for managing an organization (LGU), implementing its financial policies, and communicating with a local community, which enhances the transparency of public finance policies. Also, attention should be given to the benefits resulting from changes to the allocation of funds, the manner of planning a budget, as well as the use of market mechanisms in assessing the performance of tasks. The allocation of funds based on objective criteria and the accurate unit costs of a given project, being the opposite of competitive bidding, discretionary or output management procedures, allows for conducting cost comparisons and selecting most favourable bids. LGU task based budgets, implemented in an appropriate manner, can increase the efficiency of local government staff, and lead to substantial savings [Filas, Piszczek and Stobnicka 1999].

M. Borowik [2013, p. 21] states that a task based budget integrates a number of various tools into a coherent management system. These tools, she claims, include quality management systems (e.g. ISO 9001, CAF – Common Assessment Framework), strategic planning, monitoring and evaluation, multi-year financial planning, risk management, internal auditing, supervisory control, performance measurement systems (e.g. the balanced scorecard), or cost accounting. It can be concluded from the above that the implementation of a task based budget can increase an LGU’s effective use of its financial resources, as well as enhance its ability to assess and motivate employees. This a truly multi-dimensional tool, very rarely applied by Polish LGUs, despite a number of efforts aimed to put it into practice. A survey conducted in May 2013 by the Ministry of Finance indicated a minimal interest in task based budgets among LGUs, as well as major deficiencies in local government current planning processes [www.mf.gov.pl].

The preparation of a task based budget at a state level has been mandatory for a number of years. This planning requirement, however, is not legally regulated at a lo-
cal government level. Its mandatory character would encourage local governments to improve their planning procedures, leading to a more effective use of limited financial resources.

4. Correlations between multi-year financial planning and an annual budget

In the context of mutual relations between one-year and multi-year planning, attention should be given to the overlap of planning processes, the use of the same data at different planning stages, and the necessity of strict adherence to short- and long-term planning principles.

The above correlations are characterized by a number of factors. An annual budget is created as a result of long-term guidelines included in Multi-year Financial Plans as well as LGU current needs. Simultaneously, annual budget recommendations can lead to the up-dating of multi-year plans. The annual up-dating of long-term plans results from the necessity of adjusting them to the actual local conditions. Mutual correlations between multi-year planning and annual budgets constitute a component of the process of increasing effectiveness, in which multi-year (long-term) planning is linked to annual (short-term) rolling plans which, in turn, impact long-term plans as a result of changing conditions and new financial effectiveness guidelines, including those related to the analyses and performance of the adopted budget [Cichocki 2000, p. 15]. Mutual relations between multi-year financial planning, investment planning, annual budgets and development strategies are discussed by Lewcock [1998], Pakoński [2000], Kavanagh [2007], Krajewska and Jońca [2012], and Filipiak [2016]. The existing correlations and the resulting assessments of the performance of tasks and programmes will increase the effectiveness of LGU management and, consequently, financial management processes [see: Cichocki 2013].

Diagram 1. Increased effectiveness cycle

Source: Budżet …. [200], p. 11

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5 See also: Fleeter [2003], Steiss [2003], Wigfall and Lynch [2003], Khan and Hildreth [2002], who describe the cases of the use of annual budget and long-term (investment) planning in selected US local governments.
5. **Concluding remarks**

LGU financial management should be based on annual as well as multi-year planning. Both multi-year financial forecasts and annual budgets can be used as practical tools for managing LGU resources.

The above characteristics of short- and long-term planning can be taken advantage of by LGUs if the following requirements are met:

- implementing an effective planning process – standardised procedures at all LGU management levels (and reporting entities), good understanding and effective use of procedures at LGU supervisory and executive bodies,
- open relationships with local communities and their engagement in setting and assessing short- and long-term LGU objectives,
- identification of all correlations between LGU multi-year financial forecasts and annual budgets, making these tools compatible and complementary
- ensuring the actuality of data in the planning process, and improvements in the quality of planning,
- consideration given to the possibility of reducing the time framework of multi-annual financial forecasts (a maximum of 4 years), similarly to the central budget. It does not exclude the possibility of developing LGU financial forecasts in a longer perspective,
- with regard to annual planning, because of the fixed structure of current expenditure, consideration should be given to the use of task based budgeting and its mandatory character (leading to the increased actuality of a large part of LGU budgets, and a uniform approach to central and LGU budgeting processes). Moreover, it will allow for achieving better results in such areas as management by objectives, administration activities, controlling, etc.
- possible introduction of explicit regulations holding LGU boards accountable for effective expenditure (it would confirm Art. 44 section 3\(^6\) of the Act on Public Finance, and encourage the relevant bodies to seek planning methods and conduct ex ante analyses aimed to effectively allocate funds and assess investment effectiveness (Art. 44 section 3\(^7\) of the Act on Public Finance),
- consideration should be given to changes to Art. 229 of the Act to maintain consistency between multi-year forecasts, annual budgets and the priority of strategic multi-year financial forecasts.

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\(^6\) Art. 44 section 3 – expenditure should be incurred in compliance with the following principle: it should achieve the best possible effects with the use of available funds, and make use of optimal methods and resources. The achievement of the above tasks can be facilitated by the methodology of task based budgeting.

\(^7\) Art. 44 section 3 – expenditure should be incurred in compliance with the following principle: it should achieve the best possible effects with the use of available funds, and make use of optimal methods and resources. The achievement of the above tasks can be facilitated by the methodology of task based budgeting.
Apart from a number of weaknesses resulting from the Act, multi-year financial forecasts encourage local government staff to adopt a long-term approach to financial planning, future development and risks. Long-term planning, although not very effective today, makes decision-making bodies aware of future threats and opportunities. Similarly, task based budgets, which require greater efforts at their planning stages, can contribute to a more effective allocation of funds in operating budgets, increasing investment resources. Both tools, when implemented in an appropriate manner, can increase the effectiveness of managing LGU resources.

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Business routines play the role of corporate DNA-code in evolution of a multinational firm; they ensure the firm’s organizational stability and sustainable development. External institutional environment has fundamental impact on the genesis of a firm’s internal institutional and organizational structure, on its organizational culture and, in particular, on its institutional DNA-code. Basing on institutional matrix concept, four ‘ideal’ types of contemporary firms were identified and compared. For the purpose of institutional analysis of a multinational firm’s external environment, the institutional subsystems were considered by applying two criteria sets: formal vs. informal and legal vs. illegal institutions. The model gave background for institutional analysis of a multinational firm’s business partnerships with either peers or local actors while entering new foreign markets.

1. Introduction

Fundamentals of the theoretical approach to evolution of business firms were proposed by Nelson and Winter (1982); it was based on the model of sustainable managerial, technological and other rules and procedures, or routines. Routines keep central place in a day-to-day practice of the firm’s corporate governance and performance, ensure its sustainability and efficient development. Later studies of evolutionary approach were developed by Hodgeson (1988), Silverberg and Verspagen (1994) and other authors.

Basing on analogy with biological processes, Nelson and Winter (1982) introduced a concept of natural selection of the most effective company forms assuming that routines act as transmission mechanism in the form distribution and play the role of ‘gene’, a corporate DNA-code. Pletnev (2011) proposed a definition of routine as predictable way of action which being of regular usage in the firm became a rule reflecting
inherited expertise and acquired knowledge. We should notice that formal and informal routines have important degree of stability and inertion which give relative ‘protection’ against possible change.

At a higher level of organisation, institutional environment of a firm materializes in the firm’s organizational culture which combines a system of views and business practices commonly accepted within the firm with values, traditions, informal corporate norms and rules. Sukharev (2011) and Oleinik (2014) considered a firm’s institutional environment among fundamental factors which define the firm’s organizational culture and determine emergence and modification of routines.

2. Classification of multinational firms by institutional code

Basing on the ideas of Karl Polanyi, North (1990) introduced an institutional matrix concept which refers to the basic structure of institutional determinants such as of property rights and political system being specific for a particular society. Kirdina (2014) defined an institutional matrix as a stable system of basic institutions which have historical background and unite economy, politics and ideology, regulate interdependent functionality of those spheres related to a state as a whole.

Institutional systems of contemporary states can be empirically modelled as combination of two basic institutional matrices, namely X-matrix and Y-matrix. X-matrix refers to the institutions which are common for redistribution economy, unitary-centralized political system, and communitarian ideology with the dominance of collective, public values. Among examples, Russia, the countries of Asia and Latin America can be proposed. In contrary, Y-matrix refers to the institutions of market economy, federative-subsidiary political system, and ideology of subsidiarity with the dominance of individual values. The majority of the countries of the Western Europe and North America can be considered as examples.

| Institutional DNA-codes of a firm | Dominant | | |
|---|---|---|
| | “Y” | “X” |
| Complementary | “Y” | “Y” – A-type firm | “X” – J-type firm |
| | “X” | “X” – E-type firm | “Y” – T-type firm |

Source: prepared by the author.

Important to note that two basic institutional matrices coexist in the particular real society: for example, in Russia and China the historically dominating X-matrices
referring to redistributive economy coexist with the complementary market economy institutions.

We assume that external institutional environment has fundamental impact on the genesis of internal institutional and organizational structure of a firm, on its organizational culture and, in particular, on its institutional DNA-code. This approach allowed us to define four ‘ideal’ types of contemporary firms (Table 1).

$A$-type refers to ‘an American firm’ which is oriented to development in competitive market environment and targets maximization of long term KPIs related to shareholder value and profitability. According to Dzarasov and Novozhenov (2009) and Oleinik (2014), this type of firm can be characterized by separation of ownership from management while effective corporate governance system is built as a tool for solving the agency problem.

In contrary, $T$-type is more typical for economies in transition and, in particular, for the Russian economy. Presently, such firm can be characterized by recombined property and corporate control by insiders, which can be also informally integrated to shadow stakeholders. Imperfection of property rights institution and uncertainty of corporate control rights enforcement in respect of both specific assets and cash flows being produced by those assets effectively reduce business decision time horizon for insiders.

<table>
<thead>
<tr>
<th>Selected criteria</th>
<th>$A$-type firm</th>
<th>$T$-type firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate governance structure</td>
<td>• Separation of shareholder ownership and management;</td>
<td>• No separation of shareholder ownership from management;</td>
</tr>
<tr>
<td></td>
<td>• Transparent corporate governance system with significant outsider involvement;</td>
<td>• Non-transparent corporate governance system;</td>
</tr>
<tr>
<td></td>
<td>• Noticeable participation of institutional stakeholders.</td>
<td>• Dominating participation of large insiders backed by shadow stakeholders.</td>
</tr>
<tr>
<td>Objective function</td>
<td>Maximization of long term KPIs related to firm’s growth and, in particular, shareholder value increase.</td>
<td>Maximization of any form of short term insider rental income.</td>
</tr>
<tr>
<td>Conflict resolution mechanism</td>
<td>Predominantly, via regulatory framework and the state-controlled enforcement system.</td>
<td>Predominantly, via informal institutions facilitating alternative enforcement system.</td>
</tr>
</tbody>
</table>

Source: prepared by the author.

Referring to Dzarasov and Novozhenov (2009), the managers of $T$-type firm target earning short term insider rent in various forms. Evidently, such strategy will be the most effective in economy of redistributive type. Comparison of key characteristics referring to $A$-type and $T$-type firms is presented in Table 2.

Type $J$ refers to ‘a Japanese firm’ while type $E$ refers to ‘a European firm; each combines institutional elements referring to both $X$ and $Y$ matrices. For both types...
of firm, insiders play more important role in corporate governance. In particular, for $E$-type of firm the insiders representing the company personnel are normally involved into corporate governance via the legally formalized norms which are implemented through specific corporate procedures between the firm administration and trade unions.

In contrary, in $J$-type of firm the employees usually are less visible as formal stakeholders however in practice they participate in exercising control of the firm’s activities. Referring to Leontyeva (2009), an important element of corporate governance system of a Japanese firm is substantial involvement of institutional stakeholders such as ‘main banks’ which cannot commensurate to their formal role of minority shareholders. Oleinik (2014) argues that Japanese firm can be treated withing the framework of an agent coalition model while such firm targets maximization of quasi rent by increasing the market share and the volume of sales revenues.

3. Institutional environment of a multinational firm.

Contrary to invariance of DNA-code during the life of biological organisms, the institutional DNA-code of a multinational firm, in principle, can be change by incremental modifications; that allows adaptation of a firm to changing environment. Organisational evolution of a multinational firm along its lifecycle depends on the institutional environment factors. For the purpose of further analysis, let us introduce four institutional subsystems by applying two criteria sets: formal vs. informal institutions and legal vs. illegal institutions (Table 3).

Formal and informal institutions referring to as part of ‘legal’ subsystem were considered by Pivovarov (2011). The ‘formal’ group of legal institutions consists of political, economic and juridical institutions which combine legally formalized determinants being unconditional and obligatory for individuals and organisations. The ‘informal’ group of legal institutions largely includes informal relationship norms and behavior rules for individuals. Socio-cultural and professional institutions play important role in day-to-day practice of multinational firms, improve efficiency of their operations, and facilitate protection and lobbying of their interests. Finally, the institutes of knowledge sphere play increasing role in the modern society.

In the meantime, we believe that the contemporary institutional analysis of a multinational firm needs to integrate the elements of ‘illegal’ institutional subsystems. Informal illegal subsystem consists of national institutions of informal economy as well as of informal institutions involved into international criminal activity. The objective of sustainable evolutionary development of a multinational firm unconditionally requires protection of stakeholder interests against destructive impact of respective institutional factors.

Institutional analysis of formal illegal subsystem primarily targets protection of the multinational firm’s reputation and its shareholder value in the long run. Certain
business activities and operations may remain treated as acceptable and legal at the national level but will become illegal at inter-regional or international level, as a result of continuous review of international law and respective business practices, implication of new rules.

Table 3. Institutional environment of a multinational firm.

<table>
<thead>
<tr>
<th>Legal subsystem</th>
<th>Multi-national firm</th>
<th>Illegal subsystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>National and international political institutions and organizations</td>
<td>National and international socio-cultural institutions and organizations</td>
<td>National institutions and organizations staying beyond international legal norms and business practices</td>
</tr>
<tr>
<td>National and international economic institutions and organizations</td>
<td>National and international professional institutions and organizations</td>
<td>National institutions and organizations within the scope of international sanctions</td>
</tr>
<tr>
<td>National and international juridical institutions and organizations</td>
<td>National and international institutions and organizations of knowledge sphere</td>
<td>National institutions and organizations of informal economy</td>
</tr>
<tr>
<td>National and international socio-cultural institutions and organizations</td>
<td>National and international economic piracy</td>
<td>National and international organized crime</td>
</tr>
<tr>
<td>National and international professional institutions and organizations</td>
<td>National and international institutions and organizations of informal economy</td>
<td>International terrorism</td>
</tr>
</tbody>
</table>

Formal subsystem | Informal subsystem

Source: prepared by the author.

Moreover, foreign business counterparties of a multinational firm being historically considered as suitable and comfortable for cross-border cooperation may lose their status overnight as a result of putting into effect new national or international personal or sectorial sanctions.

Conclusion

The proposed model gives theoretical background of mismatch analysis between external institutional environment of a multinational firm and its internal institutional organization during the firm’s evolutionary development. It can be considered as starting point for reviewing the specific models and forms of transnational business partnerships as well as for selection of new forms and models. Institutional analysis at the level of multinational firm allows rationalizing the choice of forms, models and methods of business partnership with either peers or local actors while entering new foreign markets. Significant ‘institutional distance’ or ‘mismatch’ between the firm’s internal institutional and organizational structure and its external environment on particular international or national markets can limit the firm’s development and cooperation potential, become an obstacle for setting up a forward looking cooperation with potential business partners on the respective market, and may provoke business conflicts.
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Regulation Issues Function for the Corporate Governance: Restriction or Support for Company

The financial crisis of 2008–2010 and the followed changes of regulative mechanisms affected the organizational management. The re-thinking of private freedom for competition and of commodity market’ principles implemented in group relationship concerned the HRM elements (motivation, intra- and inter- organizational communication, performance measurement) and socio-cultural aspects of corporate governance.

The discussions on the balance between the levels of regulation and market were revitalised with the financial crisis 2008–2010, when Europe attempted the restrictions on the individuals and companies. The maximal limits were imposed for the banking sector bonuses, the new mechanisms of the risk management were introduced for the investment activity of credit institutions.

The external regulation should enhance the internal rules of the corporate governance and business’ societal responsibility policies. But in fact, in companies the opposite process is observed: the external and internal regulative tools “compensate” each other, and the level of the market ideology increase inside the organisations and outside within the relationship with clients and other partners.

The competitive strategies represent the more significant element in the organisation’ development than the collaborative ones, – from both angles – inside, within the human resources internal market (especially, when companies are constrained to select people for dismissing), and outside, when the “fair play” rules between rivals are substituted with the aggressive war for customers, as well for cost leadership as for creation of new market niches (e.g., the e-sellers of services, especially, with sharing model).

At the same time, the correct use of the social or environmental issues and regulative “fair play” of companies permit to assure corporate development even at a predatory market, e.g. Givelocity (a community for shared giving and voting, founded on 2012).
or WeSpire (a consulting company that develops employees’ engagement technology with dynamic content, social levers, and gamification, founded on 2012) give examples of winning on the basis of preference for regulative and social values.

These examples illustrate the fluctuation process of the role of transformation and transaction as two key sources for value’ creation. In the digital economy, the networks open new possibilities to get profit from the transaction, but the eventual opinion on the transition from transformational type of economy towards a transactional one does not reflect the reality: the communication represents the way to transform the world of rules and symbolic environment for individuals. Within a transparent and open digital world, the companies will use the natural monopoly and scale’ economic effect, but the real economic action will be based on individual choices and preferences, the value and normative regulation.

The path for successful corporate governance goes by the creation of new ideologies and symbolic universes, such as organic agriculture (Starbucks as a good example of exploiting this system of values) or authentic products, or the access to the new point of view at this world (such as use of the unmanned aerial vehicles, UAV, this new mass market for civilian-drone industry was created by Frank Wāng Tāo, who personally was fond of multi-copters), or quasi-institutionalised movements as Occupy Wall Street.

The transformational economy concerns the raw material and natural resources, but also treats the material that is generated by human beings – culture, symbols and values, perception and motivations. The creation of new vision of the universe is an example of the transformation of the angles of view, enlarging possibilities to get knowledge of the reality around. This new reality of sense and knowledge is oriented to the higher level of human needs, the cognitive economy uses the new methods and treats the new subject: the aesthetic perception and the understanding of the meanings, that are connected to the self-fulfilment.

The comparison of the transformational and transactional economies is represented below (table 1), the transactions disserve the social deficiency needs, such as need for esteem, success and a will to belong to a group. The transactional economy in cyberspace is oriented to create and to satisfy the social needs:

| Table 1. Comparative analysis of transformational and transactional types of economies |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| **Real Economy**                         | **Transformational economy**                                                                                                      |
|                                         | • Treatment of a material                                                                                                          |
|                                         | • Purpose – to satisfy the basic needs (deficiency motivation)                                                                      |
|                                         | **Transactional economy**                                                                                                           |
|                                         | • Carrying out operations                                                                                                          |
|                                         | • Purpose – to create new social needs (deficiency motivation)                                                                     |
| **Digital Economy**                      | **Transformational economy**                                                                                                        |
|                                         | • Treatment of data and interpretation                                                                                               |
|                                         | • Change of the culture, symbols and signs                                                                                          |
|                                         | • Purpose – to reflect or discover “meta-motivations” – cognitive and aesthetic needs and need for self-fulfillment actualization   |
|                                         | **Transactional economy**                                                                                                           |
|                                         | • Carrying out communication                                                                                                        |
|                                         | • Purpose – to satisfy the social deficiency needs (esteem and belongingness) and meta-motivations by meeting others                 |

*Source: prepared by the author.*
Search for harmony reflects a profitable and privileged niche of market, there the cognitive and aesthetic needs are satisfied with goods and services, material and non-material, in the form of physical and intellectual assets and art objects. The self-actualization and transcendence needs, according the A.H. Maslow’ motivations hierarchy, can be satisfied in the complex activity of both transformations and transactions, because the eighth level of meta-motivation (transcendence) can be achieved by the personal communication of helping others’ self-fulfillment and personal growth.

The commercialization of the meta-motivation permits to get revenue from the regulation, based on social embeddedness of economic action [Polanyi, 1968; Granovetter, 1985]. The companies can use legal and quasi-legal tools, including the manipulative advertising and public relations campaigns. The social responsibility plays, in this case, the role of the element of promotion. At the same time, the local inhabitants, environmental activists or social initiative groups are able to organise different, legal and illegal pressure on corporation to force them to the social responsibility’ decisions and activities [Zhang & Luo, 2013].

In this situation, the regulation serves as a social risks’ management tool that helps to prevent potential dangers of the imposed social responsibility actions (such as blocking the railway against a train passing with nuclear waste). The regulative mechanisms help organisations to build an efficient structure of negotiations between an organisation (corporation, governmental establishment, international institution etc.) and different stakeholders, who express their interest to take part into the regulating a process. An example is done by the transparent safety system in USA nuclear plants, there the largest groups of population are invited to control the indicators [US NRC, 2002]: the USA Nuclear Regulatory Commission has an oversight and assessment process to yield publicly-accessible information on the performance of plants. Each indicator is reported quarterly on the NRC web site, and all stakeholders can take part into the control procedures.

The preliminary analysis of the functional roles of regulation inside organisations gives the following structure (table 2):

<table>
<thead>
<tr>
<th>Functions</th>
<th>Regulation</th>
<th>Market competition</th>
</tr>
</thead>
</table>
| Restricting | • Organizing flows with rules and limits for the discretionary decisions  
• Produces additional costs | • Shareholders interests are related to the maximum prosperity, including the social responsibility of companies  
• Destroys the long-term relations |
| Supporting | • Assures planning and sustainable development  
• Adjusts links with stakeholders, helps to adapt products to the customers’ needs  
• Prevent conflicts with stakeholders  
• Big data’ use for better distribution of resources flows and assets | • Helps to find innovative schemes and seeks the business efficiency  
• Avoid or hunt away the weak business from the market  
• Satisfy the search for freedom of the entrepreneurial activity |

*Source: prepared by the author.*
The internal regulation inside companies also is a supporting element for management activity, especially in determining the meanings and ideology of the human resources involvement. The “classical” managers rarely take into account the remark of F. Taylor: “The words “maximum prosperity” are used, in their broad sense, to mean not only large dividends for the company or owner, but the development of every branch of the business to its highest state of excellence, so that the prosperity may be permanent. In the same way maximum prosperity for each employee means not only higher wages than are usually received by men of his class, but, of more importance still, it also means the development of each man to his state of maximum efficiency, so that he may be able to do, generally speaking, the highest grade of work for which his natural abilities fit him, and it further means giving him, when possible, this class of work to do” [Taylor, 1911, P. 5].

Within the digital economy, customers, employees and partners of a corporate business structure are oriented to the sustainable development and regulative mechanisms for the highest level of needs.

**Conclusion**

The comparison presents the advantages of the both models, institutional economics gives more elements of the functions of market and of regulation. But the contribution of this reflection in this paper is to find the interweaving between collaborative and competitive strategies and between market and regulation approaches.

**Bibliography**


Understanding the Concept of Circular Economy

Not many people think about how much waste is produced by the world economy. It is not only electronics, but also glass, paper, plastic and wasted food. Many companies produce losing huge amounts of heat, getting rid of waste water, throwing away not fully used paper, plastic, toners or electronic devices. All these items might be reused in circular economy, instead of creating gigantic waste resources.

This paper presents the idea a circular economy, which is based on the concept of creating products and services in a certain way, aimed at minimalisation of negative effect on natural environment and usage of resources.

Introduction

Monetary profit has been the most important business factor for decades, but ways of creating this profit – affecting society and natural environment – has proven to be of lower priority. The current world’s consumption rate is alarming, more and more waste is produced and the natural environment has been significantly devastated. Social and technological development has forced companies and countries to switch to the idea of sustainability and long-term planning.

Social contract, which was still in force, until recently, was designed to produce the maximum amount of the cheapest article. The XXI century made this agreement become outdated because of increasing consumer awareness, growing importance of selecting good quality of products, as well as paying attention to the manufacturer as a company favorable to environment. Until recently, it was enough to ensure that the company makes products or provides services of good quality. This was ensured by certifications based on the ISO 9000 series. Nowadays, environmental issues have growing influence on enterprises and countries introduce sharper requirements in this area as well.¹

Growing competition and changing customers’ expectations force companies to think of more aspects than just profit. Organizations need not only traditional means of production such as: raw materials, funds, workforce, knowledge and equipment, but they are also dependent on society’s acceptance. Companies strive to increase competitiveness, and as the result they pursue sustainable growth regulated by legal rights and social expectations. Therefore, the linear economy model of production, consumption and disposing is not enough anymore. The idea of no-waste production and consumption, where products are reused, remanufactured and recycled has become a necessity, not a futurist idealistic vision. The challenge is to integrate the idea of sustainability into business strategies, creating the culture of respect for circular economy.

The idea of circular economy

Unlike the linear economy, based on the principle “take-make-waste”, the concept of circular economy gives an opportunity for waste to be reconsidered as a resource, that might be reused, and therefore enabling to create closed-loop systems generating zero waste. It is no longer enough for companies to create new innovations, which would be perceived by clients as unsustainable. Caring for environmental and social problems is considered to be and inspiration in pursue for innovative solutions, and through that, new business opportunities.

The failure of the linear economy model in meeting the world’s sustainability challenges forced a creation of a new concept – circular economy (CE). The concept has gained acknowledgement among governments, companies and scientific units, proving to be a major step forward in sustainable economic growth, protection of natural environment and socio-cultural wellbeing. It aims for the creation of economic, social and environmental value.

The recently established 6R methodology for sustainable manufacturing is a milestone in creating a new business model for production companies, where sustainable

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Understanding the Concept of Circular Economy

products, processes and systems are created in the spirit of circular economy based on
the following idea: Reduce, Reuse, Recycle, Recover, Redesign and Remanufacture.

There has also been introduced a 9R model, being an explication of the 6R model:
Refuse (preventing the use of raw materials), Reduce (reducing the use of raw materials),
Reuse (product reuse: second-hand, sharing of products), Repair (maintenance and
repair), Refurbish (refurbishing a product), Remanufacture (creating new products from
parts of old products), Repurpose (product reuse for a different purpose), Recycle (pro-
cessing and reuse of materials) and Recover energy (incineration of residual flows).⁴

Fig. 2. Circular economy presentation.

Managers nowadays have a difficult task of creating a company based on sustain-
ability and circular economy values. To create an organizational culture based on these
values, managers need to take under consideration attitudes and beliefs of directors
and giving example in terms of sustainability. They must also employ people with high
socio-ecological sensitivity and convince and encourage them to implement the prin-
ciples of sustainability. Training and motivating employees in the area of sustainability
will help reach those goals.⁵ The aspects are easily converted to values of social economy,
which must be fully supported by the management and employees.

⁴ Buren van N., Demmers M., Heijden van der R., Witlox F., Towards a Circular Economy: The Role of
Dutch Logistics Industries and Governments, Sustainability 2016, 8, 647.
⁵ Pabian A., Pabian B., Kultura organizacyjna przedsiębiorstw oparta na wartościach sustainability,
Ekonomika i Organizacja Przedsiębiorstwa, nr 4/125, p. 69.
Designing products

Building circular economy will require changes in consumer behavior and business practices, therefore the key is to create products wisely. Choosing components, designing products, production process, distribution and transport in a way enabling reuse of resources, products and waste. Almost every product’s effect on natural environment is determined in the stage of products design.

There are three key principles in circular economy, when talking about industrial products:

1. **Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows.** When there is a need for resources, the circular system selects them wisely and chooses technologies and processes that use renewable or better-performing resources, where possible. A circular economy also enhances natural capital by encouraging flows of nutrients within the system and creating the conditions for regeneration.

2. **Optimize resource yields by circulating products, components, and materials at the highest utility at all times in both technical and biological cycles.** This means designing for remanufacturing, refurbishing, and recycling to keep technical components and materials circulating in and contributing to the economy. Circular systems use tighter, inner loops whenever possible, thereby preserving more embedded energy and other value. These systems also maximize the number of consecutive cycles and/or the time spent in each cycle, by extending product life and optimizing reuse. They also encourage biological nutrients to re-enter the biosphere safely for decomposition to become valuable feedstock for a new cycle. In the biological cycle, products are designed by intention to be consumed or metabolized by the economy and regenerate new resource value.

3. **Foster system effectiveness by revealing and designing out negative externalities.** This includes reducing damage to systems and areas such as food, mobility, shelter, education, health, and entertainment, and managing externalities, such as land use, air, water and noise pollution, and the release of toxic substances.6

Circular economy means revolution in our perception of products. Whereas now (in a large consumption era) we are used to hiding away or throwing away products we don’t need any more, in the future we will pay more attention to what we might do with it. This will create a need to extend life expectancy time of products. Manufacturers tend to lower the life expectancy of their products, hoping that the customers will buy a new one when the old one’s warranty has expired and the product has broken. This policy of

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forcing clients to buy new products is assisted by designing products in order to break in a specific period of time, at the same time “aging” them, using poor quality materials and components. A broken product (which warranty has expired) is very expensive to repair, which also enhances the decision to invest in a new one instead of repairing the old one. While manufacturers earn on producing new items, logistic companies earn on distribution and transport, and retailers earn on selling the products, landfills keep being flooded with short life expectancy broken products all over the world. Industry plays therefore a key role in making a commitment to sustainable sourcing and cooperation in the whole value chain.

Even for products or materials designed in a smart way, inefficient use of resources in production processes can lead to lost business opportunities and significant waste generation. Primary raw materials, including renewable materials, will continue to play an important role in production processes, even in a circular economy. In this context, attention must be paid to the environmental and social impacts of their production. Each industry and each country has different attitudes towards waste generation and management, but reuse should be a common goal. Best practices should be promoted, manufacturers should be educated and supported, and governments must take responsibility to create regulations on waste usage and reflect when issuing permits requirements for industrial installations.

Stimulating and promoting innovative solutions for industrial processes, helping reuse and remanufacture waste is a high-potential area for designers, managers, engineers, programmers etc. Technologies enabling further life cycles of products or reuse of components for another products will stimulate profits from new and alternative business models. This will lower production costs, and in a longer period of time, probably also final product prices. This will affect household budgets and inspire customers to choose wisely their buying decisions.

Business models for companies seeking circular advantage

Shifting to circular economy will lead to new business models, value chains and product-service delivery models, which will greatly affect the design, production, use and disposal process, and the collection of products and materials for reuse.

Modern technologies are changing the way we produce and consume, as well as help create innovative business models. Circular economy together with new business

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models and the digital revolution, offer companies great opportunities to build their competitive advantage. The idea of circular economy does not only mean the end of resources waste, inadequate use of natural resources, products and assets. Eliminating waste means recognition that everything has its value. This means a transition from performance to usability in the manner in which we manage expenditures and results. It is also building a much deeper relationship with consumers (developing the after-sales period through a system of product return and greater involvement of customers).

Accenture has developed five circular economy business models in order to help companies create a practical and applicable circular economy business model. An analysis of over 120 companies has shown 5 ways to generating resource productivity improvements in innovative ways. They help companies enhance differentiation, reduce cost to serve and own, generate new revenue and reduce risk – as well as their impact on the rules of resource supply and demand.

1. **Circular Supply-Chain**: When a company needs resources that are scarce or environmentally destructive, it can either pay more or find alternative resources. The Circular Supply-Chain introduces fully renewable, recyclable or biodegradable materials that can be used in consecutive lifecycles to reduce costs and increase predictability and control.

2. **Recovery & Recycling**: A model, which creates production and consumption systems in which everything that used to be considered waste is revived for other uses. Companies either recover end-of-life products to reuse valuable material, energy and components or they reclaim waste and by-products from a production process.

3. **Product Life-Extension**: By maintaining and improving products through repairs, upgrades, remanufacturing or remarketing, companies can keep them economically useful for as long as possible. This means shifting from merely selling things to actively keeping them alive and relevant. It also means moving customers from transactions to relationships, tailoring upgrades and alterations to specific needs.

4. **Sharing Platform**: In developed economies, up to 80 percent of the things stored in a typical home are used only once a month. This model increasingly assisted by new forms of digital technology – forges new relationships and business opportunities for consumers, companies and micro-entrepreneurs, who rent, share, swap or lend their idle goods. Fewer resources go into making products that are infrequently used, and consumers have a new way to both make and save money.

5. **Product as a Service**: What if manufacturers and retailers bore the “total cost of ownership?” Many would immediately adjust their focus to longevity, reliability and reusability. When consumers lease or pay for products by use through the Product as a Service model, the business model fundamentally shifts – in a good way. Performance trumps volume, durability tops disposability, and companies have an opportunity to build new relationships with consumers. 9

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These new business models can be supported by innovative technologies, which enable rising their effectiveness. Innovations in social, mobile, analytics, cloud and machine to machine communication are effectively connecting physical and digital channels, and in connecting customers. Mobile technology enables universal and low-cost access to data and applications (especially when taking Internet shopping into consideration). Machine-to-Machine (M2M) communication technology has long been used in factory control systems and vehicle telematics, but it will expand as wireless network coverage expands worldwide. Cloud Computing already replaced physical data into digital alternative, and is a key to dematerialization, along with mobile and social technologies. Social media first started to create connections between people, not they are fundamental in sharing information and opinions. They allow companies to participate in existing social networks and receive consumer feedback. In the circular economy, many companies will generate their revenues from product use instead of sales, and growth will rely on how good they are at understanding and catering to product use behavior. This means companies need to monitor and analyze data in entirely new ways. Modular design technology is not only revolutionizing how products function, but also the length and nature of customers’ relationships with those products. Because of the advances in recycling, and its increased efficiency, more and more companies are turning to the circular economy as a source of growth. Life and material sciences will also play a key role in driving input substitution at a large scale, because of ongoing innovation, which will lead to new circular material input options. It will also bring on new ways to alter outputs so they can be used as inputs. Trace and return systems support circular business models by making it more cost-effective to collect used products to service, repair, recover, reuse, refurbish or recycle them. 3D printing is steadily evolving to become a major player in the manufacturing world. It facilitates repairing by making it possible to directly print suitable parts with the exact geometry, as well as creates opportunities for circular inputs, biodegradable or infinitely recyclable. 10

The European Union’s approach

Circular economy has become one of the most important topics of discussion in European Union. In 2015 European Commission has prepared a regulatory framework for the development of the circular economy in the single market to give clear signals to economic operators and society at large on the way forward with long term waste targets as well as a concrete, broad and ambitious set of actions, to be carried out before 2020.

Both, business and consumers, are key in driving this process. Local, regional and national authorities are enabling the transition, and the European Union plays a fundamental supporter role. The EU will drive investments and create a level playing field,
remove obstacles stemming from European legislation or inadequate enforcement, deepen the single market, and ensure favorable conditions for innovation and the involvement of all stakeholders. EU plans to stimulate growth and jobs potential, as well as give new business opportunities. The plan involves 3 comprehensive commitments on ecodesign, the development of strategic approaches on plastics and chemicals, a major initiative to fund innovative projects under the umbrella of the EU’s Horizon 2020 research programme, and targeted action in areas such as plastics, food waste, construction, critical raw materials, industrial and mining waste, consumption and public procurement. Finally, horizontal enabling measures in areas such as innovation and investment are included to stimulate the transition to a circular economy. The proposed actions support the circular economy in each step of the value chain – from production to consumption, repair and remanufacturing, waste management, and secondary raw materials that are fed back into the economy.

The European Union also believes, that consumers can support or hamper the circular economy with their purchase decisions. These choices are shaped by the information to which consumers have access, the range and prices of existing products, and the regulatory framework. They are also responsible for the amounts of household waste. The EU is testing the Product Environmental Footprint, which is a methodology for measuring environmental performance, and will explore its use to measure or communicate environmental information. The voluntary EU Ecolabel identifies products that have a reduced environmental impact throughout their lifecycle.

Additionally, Member States are encouraged to provide incentives and use economic instruments, such as taxation, to ensure that product prices better reflect environmental costs.

Circular economy is believed to boost the EU’s competitiveness by protecting businesses against scarcity of resources and volatile prices. It will also enable creating new business opportunities, innovative production processes and efficient consuming. The EU believes that it will create local jobs at all skills levels and opportunities for social integration and cohesion. Energy will be saved and it will help avoid the irreversible damages caused by using up resources at a rate that exceeds the Earth’s capacity to renew them in terms of climate and biodiversity, air, soil and water pollution. Benefits of circular economy also mean lowering current carbon dioxide emissions levels.

Circular economy is therefore closely connected with key EU priorities, such as jobs and growth, the investment agenda, climate and energy, the social agenda and industrial innovation, and with global efforts on sustainable development.11

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Conclusions

Circular economy is a concept that will greatly benefit natural environment and is highly supported by governments all over the world. Although its benefits deriving from reuse and lower use of resources and products are great and indisputable, it is difficult for companies to switch to this system. On one hand, the economy and companies benefit greatly from higher consumption of goods and services, on the other, a change in mindset is necessary form the point of sustainability. Take – use – throw away concept is only a short-sighted strategy, which does not take under consideration ecological facts: natural resources are reducing, consumption is growing, landfills are being overcrowded, there is a huge problem of uncontrolled waste dispose (throwing away garbage in forests, on seas etc.)

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Work Satisfaction in Logistics Industry in Poland

The article describes results of CAWI research, based on the sample N=4816, comparing work satisfaction among people working in logistics industry and those working in other parts of economy. It briefly describes what job satisfaction is and which dimensions of satisfaction were distinguished by the authors.

Why logistics industry is so important?

Logistics is usually understood as managing supply chain management. The Council of Supply Management Professionals describes Logistics as: “the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements. This definition includes inbound, outbound, internal, and external movements”. Logistics is a part of value chain of every company, even if the only product created by the organization is information. There is no possibility to provide customer with any product without transportation of the product itself or materials and goods needed to create it. The cost of logistics is embedded in the price of everything we buy. This cost depends on work performance which is partially determined by job engagement and job satisfaction of people employed in logistics. This is one of the reasons why the authors decided to study work satisfaction among employees of this particular sector.

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2 Davar, RanjuBala; Relationship between Job Satisfaction & Job Performance: a Meta-analysis; The Indian Journal of Industrial Relations, Vol.48, No.2, Oct 2012
What is job satisfaction?

As work satisfaction was already described in many publications, also of the authors this paper will remind only a few most important opinions. In everyday language we consider satisfaction as a pleasant feeling, contentment, state when our need are fulfilled. Stample and Higgins defined job satisfaction as a positive attitude towards work and duties. Weiss agrees that job satisfaction is an attitude but he emphasize the role of evaluative judgement which is connected with the definition of attitude. Llies R. and Judge T.A. put emphasis on one component of work satisfaction and agree that it is “emotional reaction to work situation”. The authors agree the most with Lock E.A. who defined work satisfaction as “pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”.

Job satisfaction as multidimensional construct

Most of the researchers agree that work satisfaction is a multidimensional construct.

One of those was for sure F. Herzberg who asked people what are the causes of satisfaction and dissatisfaction at work. In his model his distinguished achievement, recognition, work itself, responsibility, advancement, growth. Among causes of dissatisfaction: company policy, supervision, relation with supervisor, work conditions, salary, relationship with peers and subordinates, status and security.

One of the Polish researchers who, at least partially agrees with him is Juchnowicz M.

The multidimensional hypothesis is also a base for every known to authors satisfaction questionnaire. They are built using scales which describes different dimensions

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5 Weiss H.M.; Deconstructing job satisfaction separating evaluations, beliefs and affective experiences; Human Resources Management Review; 2002; 12; p. 175
6 Lies R., Judge T.A.; An expericne-sampling measure of job satisfaction and its relationships with affectivity, mood at work, job beliefs, and general job satisfaction; European Journal of Work and Organizational Psychology; 2004; 13; p. 367
7 Locke,E.A.; The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology; Chicago: Rand McNally; 1976, p 1304
8 Herzberg F.; How to Motivate Employees; w Harvard Business Review; I 2003; p. 90
9 Juchnowicz M., Satysfakcja Zawodowa Pracowników, PWE, p. 13
of work satisfaction. The most popular one are Minnesota Satisfaction Questionnaire (MSQ)\textsuperscript{10}, Job Descriptive Index (JDI)\textsuperscript{11} or Job Satisfaction Survey\textsuperscript{12}.

**Research method**

The data was gathered as part of General Polish Satisfaction Survey conducted by Sedlak & Sedlak company. The survey was undertaken between September and November 2016 using CAWI questionnaire. The mixed sampling method was used. Firstly the internet survey was published on web page wynagrodzenia.pl (domain name translates into salary.pl, the web page is visited by over 600 000 unique users every month\textsuperscript{13}). Later target sampling was used to make the sample more representative when it comes to branch of industry and region in Poland. The authors bought targeted advertising campaign on social media and contacted local media to reach respondents in every part of Poland.

Totally 5007 respondents answered the survey. Later the data cleaning procedure was used. At the very beginning the authors excluded records with too little time devoted to fill in the questionnaire. The next step was qualitative analysis of the outliers when it comes to demographic variables. Finally, the answers with impossible combination of answers were detected and deleted. Details of cleaning procedure are considered as know-how and competitive advantage of the Sedlak & Sedlak company. After the data cleaning there was 4816 respondents left. Despite the effort the sample still was slightly biased. To make the sample representative in terms of industry and position level weighting adjustment was introduced.

**Research sample**

There was 1972 women (41%) and 2844 men (59%) in the sample. Although in Poland historically there was always less women on the labour market, in 2014 the proportion was almost equal\textsuperscript{14}. Thus in gathered sample men were overrepresented. The average age was $M=37.4$ years ($SD=9.7$, min=19, max=67). The respondents were employed in all parts of Poland (Dolnośląskie – 8.9%, Kujawsko-Pomorskie – 4.7%, Lubelskie – 3.3%, Łódzkie – 6.8%, Małopolskie – 9.5%, Mazowieckie, 21.3%, Opolskie – 1.8%, Podkar-


\textsuperscript{11} Bowling Green State University; https://www.bgsu.edu/arts-and-sciences/psychology/graduate-program/industrial–organizational/research/job-descriptive-index.html

\textsuperscript{12} Spector P.E.; Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey; American Journal of Community Psychology;1985; Vol. 13, No. 6.

\textsuperscript{13} The data collected by Google Analytics for November 2016

\textsuperscript{14} Kobiety i mężczyźni na rynku pracy 2016; Główny Urząd Statystyczny; stat.gov.pl/download/gfx/portalinformacyjny/pl/.../kobiety_i_mezczyzni_2016.pdf
packie 3,3%, Podlaskie 1,7%, Pomorskie – 6,6%, Śląskie 11,8%, Świętokrzyskie 1,7%, Warmińsko-Mazurskie – 2,7%, Wielkopolskie 8,5%, Zachodniopomorskie – 4,2%). They were working on different positions level (intern – 0,5%, production line worker – 5,7%, manual worker 8,5%, machine operator – 8,7%, specialist – 30%, senior specialist – 13,8%, manager of less than 11 people – 9,6%, manager of more than 10 people – 5,7, director 2,5%, management board 0,7%, other – 14,3%).

The respondents were asked in which sector they work, there were offer 20 potential answers, including “other” option.

**Table 1**: brunch of industry respondents were employed in:

<table>
<thead>
<tr>
<th>branch</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>public administration</td>
<td>302</td>
<td>6,3</td>
</tr>
<tr>
<td>banking</td>
<td>155</td>
<td>3,2</td>
</tr>
<tr>
<td>construction</td>
<td>305</td>
<td>6,3</td>
</tr>
<tr>
<td>energy and hear</td>
<td>164</td>
<td>3,4</td>
</tr>
<tr>
<td>trade</td>
<td>521</td>
<td>10,8</td>
</tr>
<tr>
<td>art. And culture</td>
<td>51</td>
<td>1,1</td>
</tr>
<tr>
<td>logistics</td>
<td>244</td>
<td>5,1</td>
</tr>
<tr>
<td>media, advertising</td>
<td>104</td>
<td>2,2</td>
</tr>
<tr>
<td>education</td>
<td>213</td>
<td>4,4</td>
</tr>
<tr>
<td>NGO</td>
<td>29</td>
<td>0,6</td>
</tr>
<tr>
<td>production</td>
<td>256</td>
<td>5,3</td>
</tr>
<tr>
<td>industry</td>
<td>1019</td>
<td>21,2</td>
</tr>
<tr>
<td>agriculture</td>
<td>34</td>
<td>0,7</td>
</tr>
<tr>
<td>health service</td>
<td>206</td>
<td>4,3</td>
</tr>
<tr>
<td>IT</td>
<td>228</td>
<td>4,7</td>
</tr>
<tr>
<td>telecommunication</td>
<td>79</td>
<td>1,6</td>
</tr>
<tr>
<td>insurance</td>
<td>64</td>
<td>1,3</td>
</tr>
<tr>
<td>business services</td>
<td>181</td>
<td>3,8</td>
</tr>
<tr>
<td>public services</td>
<td>209</td>
<td>4,3</td>
</tr>
<tr>
<td>other</td>
<td>452</td>
<td>9,4</td>
</tr>
</tbody>
</table>

*Source: prepared by the authors*

**The questionnaire**

The survey was designed and conducted by Piotr Sedlak and Piotr Jurczak using mix of new questions and items created by previous employees of Sedlak & Sedlak. The items were presented in forms of statements.

The respondents were giving their answer on 5 point Likert type scale (strongly disagree, rather disagree, neither agree, nor disagree, rather agree, strongly agree).
was also “not applicable” answer. Later on, the data was coded as numbers and treated as order variable.

Altogether there were 65 statements which created 12 dimensions (scales) of work satisfaction.

**Table 2: Scales of work satisfaction questionnaire**

<table>
<thead>
<tr>
<th>Name of the scale</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>satisfaction with salary</td>
<td>6</td>
<td>0.87</td>
</tr>
<tr>
<td>relations with superiors</td>
<td>6</td>
<td>0.89</td>
</tr>
<tr>
<td>relations with colleagues</td>
<td>5</td>
<td>0.82</td>
</tr>
<tr>
<td>autonomy at work</td>
<td>3</td>
<td>0.79</td>
</tr>
<tr>
<td>organization and working conditions</td>
<td>9</td>
<td>0.85</td>
</tr>
<tr>
<td>bond with company</td>
<td>4</td>
<td>0.84</td>
</tr>
<tr>
<td>company image on consumer market</td>
<td>3</td>
<td>0.79</td>
</tr>
<tr>
<td>company brand as employer</td>
<td>4</td>
<td>0.77</td>
</tr>
<tr>
<td>possibilities of professional development</td>
<td>5</td>
<td>0.83</td>
</tr>
<tr>
<td>communication</td>
<td>6</td>
<td>0.76</td>
</tr>
<tr>
<td>personal fit in with devoted duties</td>
<td>6</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Source: prepared by the authors

As the statements are part of Sedlak & Sedlak know how they cannot be disclosed.

**The Results**

The results were presented on 5 point scale (-2 very dissatisfied; -1 rather dissatisfied; 0 – neither satisfied, nor dissatisfied; 1 – rather satisfied; 2 – very satisfied).

**Table 3: Satisfaction score in different scales**

<table>
<thead>
<tr>
<th>Name of the scale</th>
<th>Mean in logistics industry</th>
<th>Mean in other industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>satisfaction with salary</td>
<td>-0.55</td>
<td>-0.49</td>
</tr>
<tr>
<td>relations with superiors</td>
<td>0.41</td>
<td>0.49</td>
</tr>
<tr>
<td>relations with colleagues</td>
<td>0.56</td>
<td>0.66</td>
</tr>
<tr>
<td>autonomy at work</td>
<td>0.23</td>
<td>0.41</td>
</tr>
<tr>
<td>organization and working conditions</td>
<td>-0.02</td>
<td>-0.05</td>
</tr>
<tr>
<td>bond with company</td>
<td>-0.43</td>
<td>-0.37</td>
</tr>
<tr>
<td>company image on consumer market</td>
<td>0.58</td>
<td>0.63</td>
</tr>
<tr>
<td>company brand as employer</td>
<td>0.28</td>
<td>0.31</td>
</tr>
<tr>
<td>Name of the scale</td>
<td>Mean in logistics industry</td>
<td>Mean in other industries</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>possibilities of professional development</td>
<td>-0,34</td>
<td>-0,17</td>
</tr>
<tr>
<td>communication</td>
<td>0,29</td>
<td>0,28</td>
</tr>
<tr>
<td>quality of management</td>
<td>-0,14</td>
<td>-0,14</td>
</tr>
<tr>
<td>personal fit in with devoted duties</td>
<td>-0,06</td>
<td>-0,02</td>
</tr>
<tr>
<td>overall job satisfaction</td>
<td>0,04</td>
<td>0,08</td>
</tr>
</tbody>
</table>

Source: prepared by the authors; N=4816

Having in mind that the answers range is between -2 to 2 the mean differences in particular scales are very small. Also overall satisfaction level is very similar.

As the distribution of overall job satisfaction variable was not proven to be Gaussian distribution, the authors used U-Mann Whitney test to investigate statistical significance of differences for overall job satisfaction and other scales.

Table 4: Test of statistical significance for overall satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Rang sum</th>
<th>Rang sum</th>
<th>U</th>
<th>Z</th>
<th>p</th>
<th>N of non Logistics employees</th>
<th>N of logistics ind. employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall job satisfaction</td>
<td>11065525</td>
<td>533811,0</td>
<td>508835,0</td>
<td>0,161</td>
<td>0,871</td>
<td>4593</td>
<td>223</td>
</tr>
</tbody>
</table>

The undertaken U Mann Whitney tests proved that there is no statistical differences between mean satisfaction levels (overall and in every scale) among employees working in logistics industry and other employees.

Conclusion

The researched showed that satisfaction level among employees of logistics industry and other industries is no different. The logistics as every industry is unique and special in its own way. Despite those differences the research proven that in the research we cannot tell that the work satisfaction level among people employed in logistics is higher or lower in comparison with other sectors.

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The tendency to emphasize own regional identity and empathy with the so-called small homeland has long been observed among different nations. There are structures and mechanisms which, on one hand, are designed to protect these unique elements of cultural and natural heritage and, on the other – to enable their promotion. The objective of this paper is to indicate the importance of a proper way of communication with the stakeholders both in the process of creating the tourism product of the region (in the first stage) and its functioning. The development of such a product requires consultation with various groups and the following understanding of their needs. If the recipients are not informed about the tourism product the success is not guaranteed. It is therefore necessary to select the proper tools of marketing communication. It should also be pointed out that, currently, there is a visible interest in such forms of communication which not only draw attention, but also invoke positive emotions and associations. The empirical part is based on the professional literature research, observation, analysis of the secondary data (selected examples of regional tourism products), and the results of primary research. The paper is a review and it serves – as intended by the author – as an inspiration for the discussion on the presented issues.

Introduction

Natural, cultural and historical heritage of the region are the foundation for the creation of an attractive and unique regional tourism product. This product, when properly promoted, can become an interesting focal point of the region. Tourism contributes, among others, to exploration of these values and destinations, as much as to the socio-economic development of these regions and locations. The regional tourism products perfectly fit this trend; these are the products created with the use of resources of
a certain place, its specifics and, in particular, their historical, natural and cultural heritage. It is not enough to create such a product; the marketing communication is essential. The essence of the communication has to be the flow of information between various entities involved in creating and implementing the product, aimed at establishing common and identical understanding of the specifics of the tourism product of the region as well as the universal cooperation.

The paper begins with the very essence of territorial tourism product and marketing communication. The paper then focuses on the importance and diversity of the forms of marketing communication in the process of the creation of a regional tourism product. The paper focuses mainly on the professional literature sources, the Internet data, observation, government offices' and tourism organizations' materials. On that basis there are presented the selected examples of the regional tourism products. The paper also presents the results of the primary research concerning the expectations of the tourists visiting the city of Szczecin. The paper considers only some issues in this broad topic, as the authors intend to inspire a discussion in the presented issues.

Literature overview

Regional tourism product in literature

Both in practice and literary sources (particularly in the local government practice) the concept of the regional tourism product is used often, although it is quite a complex and multidimensional concept. According to the theory of marketing, a product is all that is the subject of a market exchange, anything that can be used or consumed to satisfy one’s needs. Currently, the emphasis is put on the benefits available to the customer rather than the mere value of sales\(^1\). The customer does not buy the product itself but the benefits associated with it. The benefits that can be obtained by the use of a specific offer are closely related to customer’s needs. Thus, if the product does not meet the expectations of customers and does not meet their needs, it does not encourage its re-usage. The success is determined by the attractiveness of the product tailored to customer’s needs and by the proper communication.

The tourism marketing refers to the tourism product. In the literature, the authors frequently refer back to the definition of the Swiss professor, who defines the tourism product as a set of material objects and services that tourists use or consume during the trip\(^2\). It is often pointed out that a tourism product can be evaluated from the point of view of a certain enterprise (products delivered by operators of the tourism market that

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can offer individual products or packages), as well as a specific area. This second aspect consists primarily of natural and cultural tourism goods, certain goods and services or facilities that allow the use of these goods and services. V.T.C. Middleton identifies five main components of the overall tourism product, such as:

- tourist attractions and the natural environment of a destination (natural beauty spot and man-created cultural and social attractions),
- infrastructure and services within a destination (accommodation base, catering services, transportation services, a retail network and service providers),
- commodities of a destination: means of transportation, infrastructure – roads, railways, airports, etc.,
- the image of a destination that exists in the minds of potential customers, influencing decision about traveling to a specific location,
- price depending on, for instance, the standard of services provided, season, location or means of transport.

Various authors have different approaches to the issue of regional tourism product, therefore there are various definition. For instance, in the tourism literature there are similar with meaning phrases, such as tourism product of a region, product of the area of tourism reception, regional tourism product, the tourism product of an area. The regional tourism product is a spatial category and it is offered by a specific area, build on the basis of regional attractions and in a particular form occurs at a given location. It is characteristic for a given region and associated with its natural, cultural and historical heritage that evidence its uniqueness and authenticity. There is also a definition of a tourism product of the region, which, however, is interpreted more broadly, as it also includes attractions that are not based on the heritage of a region, for instance entertainment centers (which do not have strong features of regionalism).

Regional tourism product should not only meet complementary needs of the tourists, implementation of which is supposed to fulfill the major need that is the purpose of a travel. It has to co-create the region's image in the minds of current and future stakeholders. Such products integrate tourism (which has been a subject of interest for a long time) with regional heritage (which is a tool not yet fully appreciated and only

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recently discovered). The factors determining the regional tourism products may include, among others:

- geographical location, e.g. proximity to the major urban settlements, important routes,
- the natural environment, natural qualities, for example: lake regions (e.g. Masurian Lake District), primeval forests (e.g. Bialowieza Forest), marshes (e.g. The Biebrza Marshes), areas with heavily rugged terrain (e.g. Suwalki Landscape Park, Slowinski National Park)
- cultural environment – cultural and ethnic areas, regions of religious, sacred and pilgrimage tourism (sanctuaries, sacred places), sightseeing spots,
- the natural environment and its healing properties,
- specific climate environment, e.g. winter or summer tourism locations.

Regional tourism product is a set of tangible and intangible properties that the buyer can accept if they are consistent with his needs and expectations, and if their consumption creates the feeling of personal satisfaction. The final shape of a regional tourism product is affected by both the expectations and the active attitude of the tourists (in the choice of elements offered by a region). It should be noted that even though a tourist sees the package as the tourism product of a region, it does not always determine that there is in fact such a product. However, it is a prerequisite for creation of such a product. Therefore, the regional tourism product consists not only of specific tourist services nor the products of human labor, but also of the symbolic and aesthetic properties, such as scenery, clear water and air, and the hospitality of local people. The regional tourism product is the sum of all the products of the enterprises located in the region, tourist attractions, and the availability of specific locations or images in the region. It has a spatial dimension and is characterized by diversity and uniqueness; it is strongly identified with the region. It can be either: international (e.g. Bialowieza Forest), national (e.g. Wigry National Park), regional (e.g. The Narew Valley) or local (e.g. agritourism farms).

The regional tourism product is a certain package, containing various categories of products, including, among others:

- an area, e.g. Lower Odra Valley Landscape Park,
- a trail – made up from many places and objects associated with some overriding idea, usually interconnected by a marked route (car, walking, cycling, etc.) and with various infrastructure located along the route (e.g. West Pomerania Sailing Trail Berlin–Szczecin–Baltic)

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– an event – characterized by thematic and organization coherence as well as specific locus in time and space; most often consists of several services or services and tangible goods offered by tour operators, for example trips to interesting places, rallies, Vintage, Dominican Fair, staging of the Battle of Grunwald,
– a service – a single tourism service, for example transportation, guide service,
– a tourist attraction – usually a set of individual objects or services, complex of objects or collections located in a specific place on a relatively small area and unorganized as a trail, for example Palaces, Castles and Cultural heritage of Lower Silesia, Miedzyrzecz Fortified Region,
– a thing – an addition to other tourism products, although sometimes it may occur as a separate product, for example souvenirs; it may also be a tangible good, for example Drähmski Honey or Cucumber of Kołobrzeg.

Most authors conclude that the essential components of the regional tourism product are regional attractions (qualities). These components are “permanently” related to the region. Their features are naturalness, authenticity and uniqueness. These are unique attractions, which constitute the part of the natural, cultural and historical heritage of the region. It should be emphasized that the co-creators of the regional tourism product are various entities operating in the region, mainly operators involved in tourism, local community, local government, and the media. Among the entities involved in the process of creating a regional tourism product the crucial role is played by a territorial self-government. In present conditions the role of the administration offices does not refer to the traditional, authoritarian government but to the strength that is gained thanks to the skill of communication, discussion and understanding other entities10. An important entity involved in the development of a regional tourism product are residents of the region and local entrepreneurship, since their can condition the success of tourism projects to a large extend.

The process of creating a regional tourism product is continuous and dynamic. The appropriate marketing communication and partnerships, in order to obtain the final results, are crucial. As Peter John emphasizes, now is the time of the development of innovative ideas and democratic co-governing based on the idea of embedding the decision making not in a formal administrative structure, but in a stable, (though at the same time dynamically evolving) network of relationships between the key players, with different individual and organizational segments of public life and levels of territorial structure11. The regional tourism product is multi-created – it has many creators and it is synergistic – its creation and maintenance require proper cooperation and collaboration of many entities.

Marketing communication – selected theoretical aspects

As mentioned before, it is not enough to create the regional tourism product, it is also important to use a proper communication tactics. It should be noted that the image of a place should be properly established as it can be verified at any time. When tourists visit the region, they have their own opinion about it. The forms of communication that had affected a tourist before visiting a certain location would be of lower importance. What is actually going to matter are the true elements of the location, for example the style of living, ambience, sensory impression and the dynamics of a place, as well as the locals’ hospitality and attractiveness of the offer. Therefore, entities involved in the process of creating regional tourism product, including local governments, have to communicate their offer so that it not only effectively reaches its potential customer but also is reliable, as it can be immediately verified.

Communication is a process of a mutual transfer of data; the recipient of information becomes the sender of the next ‘content’. The content and the relationship between the interlocutors are very important in communication. Classical communication process is created by a system of the following elements:

- sender: the party sending the message to another party;
- encoding: the process of putting a thought into a symbolic form;
- message: the set of symbols which the sender transmits;
- media: the communication channels through which the message moves from the sender to the recipient;
- decoding: the process by which the receiver assigns meaning to the symbols encoded by the sender;
- recipient: the party receiving the message sent by another party;
- response: the reactions of the recipient after being exposed to the message;
- feedback: the part of the recipient’s response communicated back to the sender;
- interferences (noise): the unplanned static or distortion during the communication process, which results in the recipient’s getting a different message than the one the sender sent.

The difficulty to present characteristic features of the regional tourism product affects a choice in the use of instruments of communication. Each message should, above all, emphasize the benefits provided by the consumption of the offer, highlight the regional tourism product in comparison to other offers and build a reputation/image of the region. The actual content of promotional campaigns should include such information so that the tourists could see a tangible, verifiable and quantifiable elements that are associated with a particular service.

Defining objectives and the audience of the marketing communication is important, as there is a close relationship between the needs and the expectations of the con-

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consumers, and the choice of communication media or methods. The marketing communication of local governments is often limited to the product, which was not properly developed in response to a market demand. They rather seek buyers who are interested in a product with defined and given characteristics.

Offices should create the basis for incorporation into the operation system of their institutions a “specific marketing sensor”\(^{13}\), which is the research of needs and expectation of various target groups. This way the need and expectation can be diagnosed and deliver the information helpful in their satisfying. The preferences and expectations of the tourists are constantly changing due to, among others, the different levels of economic activity, prolongation of life, changes in household composition, an increase in personal awareness, an increase in service requirements and a certain level of comfort (as well as threats), achieved thanks to the development of technical and technological progress. Choosing the right method of communication, adapted to the specificities of the regional tourism product, requires a lot of expertise and skills in using various elements to achieve the intended objective.

The basic elements of marketing communication include: formal communication (or promotion) and informal communication. Formal communication is understood as typical promotional activities, which are planned and deliberated, and concern selected areas. Formal promotion consists of such instruments as: advertising, public relations, sales promotion, direct marketing, sponsoring, and direct sales. Informal communication is understood as the actions that indirectly provide information within the environment and at the same time affect the perception of the sender. Those are strongly related to the environment, which can have a strong impact on the perception of a certain tourism entity. Informal communication consists of various messages, for example messages relating to human factor, messages connected with methods and conditions of trade, etc.

Marketing communication increasingly uses new media and forms. The new forms are aimed at stimulating the activity of their participants and drawing their attention. It is even more important, because, as indicated by J. Civil, our perception of the message includes only 7% of the information we hear, 38% – written message, and 55% – non-verbal part of the message\(^{14}\). L.A. Woolcott and W.R. Unwin claim that an average person remembers 10% of what they have read, 20% of what they have heard, 35% – of what they have seen, and 50–70% of what they have seen and heard simultaneously\(^{15}\). It should be remembered, however, that what is important is the idea that will stand out in comparison to other offers and will show the benefits that can be gained by the recipient who uses it. An interesting form of communication include, among others, guerilla

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marketing, experience marketing, various quests and urban games\textsuperscript{16}. The essence is the commitment and inventiveness. The strength of new forms of promotion is that it affects many senses of a potential client to engage them more, and thus tie them more to the regional tourism product.

The focus on creating a satisfying experience is based on the fact that tourists don’t look for the cognitive and practical qualities but hedonistic, aesthetic or spiritual ones. What is important is the idea, and then the consistency and integration of many activities. Only strong and well-planned actions can bring the results. The effectiveness of communication policy, namely the question whether the message is properly understood (decoded) and remembered by the recipient – depends on the skills related to the selection of different forms and resources and their best possible match for the recipient.

Understanding the needs and motives that guide the behavior of the consumers is a vital condition for the choice of communication tools and the way to influence their buying decisions. The lifestyle and changes in consumer preferences, including the changes in the management of leisure time, require senders of the marketing communication message to show greater flexibility. As a rule, no single form of communication is in a position to contribute to the achievement of the set objectives. This is why more and more often, to communicate regional tourism products availability, there has to be used the integrated marketing communication. The integrated marketing communication merges the main components, namely the tools, the means and forms of promotion, as well as the messages (their content and appearance) and their impact in time and space. The result of the integrated marketing communication should be the consistent messages, transmitted in the framework of the promotional campaigns based on multiple instruments simultaneously. The integrated instruments should be mutually complementary and not contradictory. Such integration requires cooperation of many entities, and understanding that this cooperation is the only way to achieve common goals. Integrated marketing communication is focused on creating and stimulating interaction between all participants in the process. Integrated marketing communication is, on one hand, the process of communication of an entity with the market and, on the other hand – a set of tools with specific characteristics and properties, enabling the fulfillment of its functions\textsuperscript{17}.

**Research results – the examples of regional tourism products and their communication**

As it was mentioned before, the core activities that create regional tourism product can be: the specific nature of natural values (e.g. The Niagara Falls, Mazury Lakes, the


charm of the highest mountain peaks, etc.), unique architecture (Egyptian pyramids, the Great Wall of China, the historic centers of European cities), natural peculiarities (hot springs, African savannah, habitats of animals and birds) or a special nature of the areas (e.g. places of worship, martyrdom, sports arenas). These properties determine the specifics of a region and originality of the regional tourism product as well as the region itself. It is important not only to identify such values but also to define their character, uniqueness, utilization level, availability and analysis of possible relations.

One of the examples of regional tourism products utilizing the potential and natural assets of the region is “Świnoujście – fortress on the islands”\(^{18}\). The town of Świnoujście has for years been an important military point on the map. Since 1863 it functioned as a sea fortress with four independent forts. New facilities were built later on. Currently, the biggest attraction for tourists are the three forts: Angel Fort, Gerhard Fort and Western Fort. In 2014, these objects were supplemented by the underground town, uncovering the secrets of the Cold War. In 2005, the first, 4 km long hiking trail was prepared – “The Fortification Trail’, which includes the most interesting monuments of military architecture on the Eastern side of the river Świna. It was created as a didactic route to preserve its historical and educational character. The fortifications of the town of Świnoujście has been awarded the prestigious Certificate of the Polish Tourism Organization in the competition for the best tourism product. This product is used for a number of events, including “Fortress Days in the Islands”, event accompanied by a historical spectacle. The collaboration of various entities interested in common communication should be highlighted in the creation of this product. Developing an attractive tourism product, tailored to customer requirements, does not guarantee success in sales. Indeed, it is necessary to inform potential visitors about the existing product, justify its promotion and capture their attention. The crucial part is sending the information about it to potential tourists. The message should include an information about the offer, arguments for its promotion and it should attract attention. Therefore the information about this product should be found on the general website of the town, sites of forts, numerous sites of history fans, sites of tourism organizations and sites of other stakeholders. This regional tourism product also uses traditional forms of communicating with customers, such as leaflets and specially prepared information for Tourist Information.

The town of Świnoujście also created a regional tourism product around its second significant natural asset, the location; it is spread on dozens of islands (hence the name “Land of 44 islands”), surrounded by the waters of the Baltic Sea, Szczecin Lagoon and the river Świna. The three largest islands – Usedom, Wolin and Karsibór are inhabited. Each of them, however, has a unique character. To encourage tourists to learn more about these assets, the town utilizes a variety of non-standard forms of communication, for example questing. Participants of the game, thanks to its form, can explore

the elements of the cultural and environmental heritage and history of the site in an interesting way. This communication activates different target groups: children, youth and adults, also at the stage of creating the quests. It strengthens ties and influences closer cooperation between different entities. The common preparation of quest puzzles, meeting people familiar with the history, legends and anecdotes related to the town integrates the local community. Such action reinforces the sense of identity and pride of the place of living. These forms involve both the inhabitants and the tourists. These forms also have important educational value, combining fun with learning about the history, natural resources and the charm of the town. They also fulfill another objective: they develop a sense of identity with the region and create its positive image. As part of the regional tourism product in Świnoujście, in order to offer its natural values, the town presents the nature quest “Discover natural treasures of the Land of 44 islands”\(^{19}\). The main objective of the game is to visit 13 monuments of nature in Świnoujście, which are distinguished by their appearance, age or size, and often have intriguing names like “Corsairs”, “Sailors”, “Dwarfs”. After completing each of the three stages (island of Usee-dom, Wolin and Karsibór) various titles are obtained. The final title obtained by everyone who finishes the game is the “Invincible discoverer of natural treasures.” In order to do that, a tourist has to visit natural monuments marked on the map, complete the password using the numbered letters that are used in the poetic riddles hidden in trees and bushes. A complete password, along with the photo with the background of the church in Karsibór, can be presented in the town’s Tourist Information. Completion of all three stages is reworded with a special certificate with a commemorative stamp. Along with the description on the map, tourists can get a lot of interesting information about the different species of trees and shrubs, and learn about their history.

Such unconventional promotion of regional tourism product allows the rediscovery of the region, becoming familiar with local heritage, activating a local community involved in its creation. It is also a chance to reach places every day unnoticed or those for which there is no admission for everyone. Participants of the quest can learn about the elements of cultural heritage, landscape and history of the place in an interesting way which facilitates their memorization. Following the principles “men learn best from their mistakes and experience” and “the best way to learn science is through playing” the new skills are, the knowledge is expanded with accompaniment of a good entertainment. The relatively low cost of such promotions, engagement of stakeholder groups, diversity and quite large size of target groups contribute to the fact that it is interesting and forward-looking tool of promoting regional tourism products. The common, non-standard measures which force people to work together always have an integrating function. Self-government should inspire social communication and create conditions for mutual understanding by providing information. The strength of the self-govern-

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ment authorities is gained through communication, discussion and understanding each other’s needs; their role is not longer merely the transmission of information.

A very important aspect of the development of regional tourism product is focusing on meeting the best possible customer expectation. Tourists have different expectations and are driven by different motives in choosing the tourism offer. Not all needs are revealed. It depends on the category of tourists and the type of tourism that is offered. To design a regional tourism product it is essential to know tourists’ motivation. Therefore it is important to research their expectations.

The example of such activity was the research on the expectations of tourists coming to the city of Szczecin. The research was conducted as part of the municipal research framework for the city of Szczecin in summer of 2012. This consisted of the individual interviews based on the questionnaire (PAPI) carried out among Polish tourists coming to Szczecin. The target group of 1395 people was chosen via stratified sampling method. Based on the research, a conclusion can be drawn that the objective of most arrivals to Szczecin is indeed to rest (almost 50% of all responses). It should be emphasized that the average tourist very often interprets resting very broadly. Every respondent could have chosen up to three answers. The second most often chosen answer was city exploration – this objective received a similar number of responses as resting. The third objective is a business purpose – as indicated by the 26.24% of the respondents.

The city of Szczecin meets these expectations by offering, among others, regional tourism products related to a qualified tourism (water) as well as to the historical qualities. There are two main tourism routes in the city:

a) urban hiking trail, which is marked by a red dotted line painted on the sidewalks; following the trail, tourist can see the Old Town and its most precious monuments;

b) Golden Trail, which starts from the Castle of the Pomeranian Dukes, going through the Avenue of Pope John Paul II, through the park, up to the city forest; despite a fairly long distance, the trail allows to see the city’s most pleasant natural places like Rusalka lake, a rose garden, Głębokie lake; the trail can be walked on foot or crossed by bike; at the lake the bike can be switched to a kayak or a pedal boat; it is a unique trail in Poland.

For a fan of history, the city created a regional tourism product “Extraordinary People of Szczecin and their Houses”, which, combined with a trail, allows to learn the history of the city through the history of the beautiful, historic buildings of the nineteenth and twentieth century – the true ornaments of streets and squares and their resi-

20 see: A. Smalec, J. Hernik, Marketing communication channels used by local governments vs. tourists’ expectations, International Journal of Applied Behavioral Economics, The international conference in economics and administration ICEA 2013, University of Bucharest, p. 357–369.


dential character. This project combines the initiative of several residents of Szczecin with the promotional activities of the city authorities.

For enthusiasts of water and its recreational value, the city offers, among others, Międzyodrze region and the possibility to enjoy a kayak trip. It should be emphasized that such tourism products are not only designed for tourists but also for the locals. Residents, in fact, behave in their own city like tourists. The challenge for Szczecin and interested stakeholders is to extend the scope of such offer and to create conditions based in the new infrastructure along the Odra River. It should lead to the use of waterside public space. It is consistent with the city’s long-term strategy and the “Floating Garden” product brand. In the scope of promotion, the cooperation with Regional Tourism Organization and the local governments of the Euroregion Pomerania should be established.

The comprehensive regional tourism products covering several regions, particularly projects in the form of a partnership of several entities, have a better chance of external financing. The European Union has repeatedly emphasized the requirement of cooperation between many entities, and recommended a social dialogue at all the levels of the design of a regional tourism product. It is important to incorporate such a product into local life in such a way so as not to disturb the balance of its space and to preserve its authenticity. It is worthwhile to merge various attractions with others from different cities and regions, for instance into the offer of thematic routes, e.g. “Industrial Monuments Route”, “Dukes of Mazovia Route”, which should be the basis for composing the offer formulated from various components such as health services, cultural offerings for the evening, regional dinner. It is worthwhile to cooperate with carriers, accommodation facilities and travel agencies in order to create a packaging product.

An example of such a product, which brings together several municipalities of West Pomeranian Voivodeship, sailing clubs, and associations, is West Pomeranian Sailing Trail23 – a network of touristic ports (marinas) in West Pomerania region in Poland. Thanks to their joint efforts, the entities involved in the creation of a common tourism product both have more strength in applying for funding and in successful communication. The water trail is the main water route starting in the capital of Germany—Berlin, crossing the Baltic up to Scandinavia. The trail has the unified visual identification system. The evolved entities join forces in other complementary projects, aimed at promoting the improvement of security, implementation of green solutions, information or education. The trail was created in consultation with municipalities, taking into account current needs and developmental opportunities. One of the forms of its promotion is a tall ships regatta, which is an opportunity to organize leisure time for the visitors and the residents. Fairs and various kinds of competition are another form of promotion used by those entities. In order to engage the consumers of this tourism product, there

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are various competitions, e.g. a photo contest, for which each participant can send from 1 to 3 pictures. The main objective of the contest was to stimulate interest in the culture of their region, develop artistic sensitivity, draw attention to the beauty and modernity of the ports and marinas in the vicinity of the Szczecin Lagoon, the city of Szczecin and on the Baltic coast, as well as to present the work in the field of photography.

An example of a regional tourism product, combining different regions and using an increasingly important travel motivation, which is the kitchen of a visited country or region (culinary tourism) is Małopolska Fruit Route. It was created to promote and protect local resources of cultural and natural heritage as well as the development of local communities with respect for the values of the natural environment. The Route goes through 23 municipalities of Małopolskie voivodeship, covering mainly the fruit farms. The Route is marked by signs (overlapping silhouettes of three apples) and shows farms, where a tourist can make taste and purchase fruits and other local products, as well as get familiar with the technology of production of fruit. Such a tourism is based on traditional dishes and flavors. It is also a good example of the collaboration of various entities.

Another type of original or unique regional tourism product, although not referring to the region's natural qualities, are special events. Those are the events which have a special kind of regional mark, are strongly associated with the region and are uniquely associated with location in the minds of the tourists. An example of a regional tourism product of this kind are the grape harvest days in the city of Zielona Góra. It is the biggest event of the city of Zielona Góra in Poland. It takes place in September and is the crowning work of the harvesters in the vineyards. Every year the festival begins with a ceremony of handing over the keys to the city to the god of wine and pleasure - Bacchus, accompanied by a procession of noisy Bacchaes and of a wine-abusing Satyr. This event is known both in the country and the world. During the festival there are various cultural and sport events, numerous concerts and degustation of food from various parts of the world. The central place is occupied by Lubuskie wines. There is a special place in which the Wine Town is build. It is a special zone, where winemakers from all around the region present their wines and other products in tiny wooden houses. The key point of this event is the grape harvest parade. It is almost an hour show the achievement of Zielona Góra. At the traveling platforms there are presentations of particular vineyards. The event usually lasts about 7–9 days. This event is an important part of local identity and local identification with the region. It is an example of cooperation of many groups and communities.

In terms of creating the regional tourism product, it is important that such events or parties, beside providing entertainment for the tourists or being an attraction for the locals, contribute to the preservation and promotion of historical, cultural or natural

25 http://winobranie.zgora.pl/.
heritage of the region. They should contribute to the knowledge and dissemination of local traditions, customs and culture, and emphasize the unique characteristics of the region. Such events can also be an instrument of promotion of a particular product or may increase the willingness to visit such region.

As it was demonstrated by a research conducted among tourists coming to Szczecin, increasingly important sources of information are (beside websites) social networking sites, for example Facebook or Twitter. Entities should take care of their profiles on the social networks because this source is becoming increasingly important, especially for young people. The current trend is a growing importance of mobile devices, that allow to establish contacts with a growing number of users from anywhere in the world. Unfortunately, a common mistake made by entities, including local governments, is to create a profile and, after some time, leaving it without any control, as there is no targeted plan of action. All standard forms of advertising are becoming less important. The consumers, including tourists, are becoming more knowledgeable, they are actively involved in collecting information. It is therefore appropriate to use such forms of marketing communication that would be both attractive and informative for consumers.

A regional tourism product can provide many benefits when it is modified according to the needs of the customers and properly promoted. It takes time before such product gets noticed. According to the theory of evolution of a tourism area by Butler (1980) the exploration phase should begin as soon as there is only but a small group of individual tourists who visit the place being attracted by its natural or cultural qualities. The places that evolved this way are, for example, The Firth of Clyde in Scotland, which once used to be a fishing village, and today it is an established tourism center.

Conclusions

The contemporary consumer no longer agrees on the role of a passive recipient. Modern consumers want to co-create the offers that they use, expecting individual approach. Optimal regional tourism products, which have a chance of great success are those that are best suited to “beam of needs” of a specific market segment; those that best meet the different needs of customers. Marketing communication is a management of the entity dialogue with the market environment. Whether the sent message is properly understood and remembered by the recipients depends on the ability to select proper forms and measures that match the recipient communication needs at the highest possible level. The forms of communication that should be undoubtedly used are these, that allow interaction with a variety of customers, creating and strengthening ties (especially emotional) with the brands, places and regions. The region – its authorities, tourist organizations, residents, local community – is involved in creating various roles, developing and supporting the sale of regional tourism products.
The decline in some regional tourism products can be primarily explained by the lack of will to adapt to the changing needs and preferences of the market, as well as mal-adjustment (or lack) of communication activities. Jointly planned and thought out actions of all engaged entities, on both conceptual and the executive level, are significant. The effectiveness of communication measures depends, to a large extent, on the message of promotional campaigns, the simplicity and repeatability. An essential condition for the success of such activities is to exceed a certain threshold below which activities remain unnoticed and fit into the general chaos of information. Communication activities need to be more creative and surprising; they should not only inform but should affect the viewer in a positive way.

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Regulative Tools for Increasing the Human Resources Competence in Corporate Structures in the Context of Economic Stagnation

The article examines innovative approaches to improve the qualification of human resources through the electronic media, taking into account existing financial and resource constraints of corporate structures. An approach for the synthesis of the existing mechanisms and techniques in this area focused on the automation process of HRM.

In the current economic realities, many corporate entities become to reduce their costs by optimization. It is proved by the fact that increases revenues from their activities, in terms of stagnation, it is extremely difficult and costly. Not surprisingly, this trend in corporate strategic planning is reflected in the HRM.

In the foreground there is the problem of the human resources development, there is a need for specialists able to show themselves as generalists, when conditions improve workload. The trend to reduce costs in the economic activity of the corporation is reflected in the reduction of the staffing structure, which not only leads to the optimization of all structures, but also frees up a large number of specialists in the labor market. Such trends have a negative impact on the qualification of employees, as allocated, the process of maintaining and improving their skills, financial and material resources are rapidly declining. To solve this problem, decisions within the HRM of a corporation are insufficient; it requires to study the external structures, specializing in solving these problems [3].
Nowadays, there are a number of mechanisms and tools that allow you to improve the skills of human resources, which are both in the early stages of their careers and occupying management positions. They offer all kinds of advanced training courses, e-learning in various Universities across the globe. In spite of the existing possibilities, a small number of professionals seeking to increase their skills. This is due to the following factors:

- Questionable advantages that give the courses, since they do not guarantee any possible career advancement or salary increases, and even a guarantee of benefits in the labor market;
- Time periods for training are not large enough to provide a qualitative change in the competence of personnel, and occupy a large time, from the standpoint of efficient personnel allocation of the free time;
- In a situation of economic stagnation, many corporate structures limit their spending on improving human resources development, which is the optimal solution, but it has consequences in the long term;
- An increase in the overall workload of the staff is reflected in their quest to increase their skills, some lay the opportunity for the long term, and there are those who altogether reject such aspirations, as they are afraid to squander strength in the shuffle when they all should apply in the conservation of their jobs [5].

Thus, the question arises about the dysfunctionality of the existing approaches to HRM to improve the qualification of human resources.

From applicable mechanisms and instruments able to work under normal economic conditions, many lose their functionality and lead to poor performance, both for corporate entities acting in this case, customers and for themselves educational organizations that offer educational services.

Consequently, in the current economic stagnation conditions required to develop optimal solutions that will optimize the costs of corporate structures and at the same time to return the effectiveness of existing programs of vocational training. In other words, you want to take into account the needs of both parties and to find a mechanism to bring the interaction between customers and sellers of educational services to the automated process. [7]

In order to solve such a robust mandate, you must create a set of measures that will allow searching for and developing solutions, the most effective:

- It is necessary to investigate the factors dysfunctionality of existing mechanisms and tools for improving human resources skills and find strengths, focusing on which it will be possible to compensate for the existing shortcomings;
- To develop a model of the interaction of the market vocational education and the labor market, which smooth out the effect of current economic stagnation, will return to raise the attractiveness of human resources qualification projects for corporate HRM;
- To justify, on the basis of empirical research example, the positive effect of the mechanism used, and to identify its impact on the HRM strategy.
The problem is the implementation of educational services in the information environment, formed relatively recently, and due to the globalization of all processes, including educational processes. In Russia, the question about the possibility of education through electronic media is only beginning to emerge, so that there is a small number of research areas dealing with this problem.

However, professional education market reacted to the innovation quickly enough. Now, almost every self-respecting university has an e-learning program, working with such electronic means ensuring educational activity as Moodle and its analogues. In addition, each university has a distance learning program, and even the possibility of individual training courses via the electronic environment. This unified methodological framework concerning the construction of cost-effective distance learning program does not exist [9]. Therefore, the only source for organizing such programs is Article 16 of the Law N 273-FZ “On Education in the Russian Federation”, which defines the area of the functioning of distance learning programs [1].

Regardless of the difficulties encountered in terms of distance education and training courses, the relevance of the subject increases in proportion to technological progress.

Today, as a result of information technology development, it is possible to systematize training processes through the electronic medium. This is important that distance training can save not only financial and material resources, but also free time of professionals, those decided to enhance their skills.

The main trend in today’s market of professional education – a clustering of existing educational systems in order to optimize their resources and capabilities, takes place for the remote training courses market [4]. Accordingly, the optimal way solutions encountered in conditions of stagnation, problems of interaction between the two markets can be solved without resorting to high costs, and not inventing totally new approach. But with the implementation of activities related to the cluster development of distance learning courses, you must correctly analyze the existing specifics in the mechanism of automation of educational processes [6]:

- Should take into account the fact that depending on the region, the effectiveness of the clustering measures will change, and if in large metropolitan areas, there are powerful educational centers, on the basis of which it is possible to collect a single cluster, the more remote regions, such centers are still only to be established;
- The usefulness of ongoing distance learning programs will be correlated depending on individual ways of learning information, ie you need to combine both classes in the form of webinars and electronic conferences, and activities in which the lecturer performs live;
- Absolutely all distance learning programs, should be focused on giving the skills that are required to obtain specific competitive advantages.

The key parameter that must be satisfied during the automated HR processes is the financial and resource constraints of corporate structures. Accordingly, the clustering of
remote training programs must significantly reduce the costs of corporations. To select the components that will reduce costs and automate corporate HRM processes, build a visual model displaying the structure of HRM costs in corporate structures:

**Picture 1. The cycle of reproduction of human resources in corporate structures**

The picture 1 demonstrates that the system of corporate financing costs, labor and time resources on the process of reproduction of human resources, is composed of many elements, and each requires its own specialist personal approach. Clustering organizations promoting domestic programs to improve human resource qualifications must take the construction of such a system of education, coming from the corporate human resources, which will automate the process of calculating the cost of each employee corporation [8]. Designing and building such a system is possible only with defined separation of professional education market segments between future educational clusters.

**Conclusion**

This process is not obtainable without control of the state, which will contribute to the legislative norms regulating the process, on the basis of existing labor law. [2] We should not forget that the clustering process and the implementation of the idea of automating the HRM processes will be carried out during the period of global economic
stagnation, which will affect both the timing of implementation and the final result. In order to successfully pass this stage and get under the effects of economic stagnation, experts in the field of remote qualification raising programs will have to work hard, but in the end, those professionals that will cope with this task and become major suppliers of educational services in the field of education.

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Ethical Dimension of Knowledge Management in Interorganizational Networks

The article presents a discussion connected with the inclusion of ethical dimension into areas of knowledge management. The authors focused on premises explaining the role and position of ethical issues in theory and practice of management, especially in the area of knowledge management and strategic management. Empirical premises indicating connection between knowledge management and ethical elements were presented based on research conducted in clusters functioning in Poland. Clusters constitute formalized interorganizational networks, where knowledge transfer in the area of ethics is of autopoietic nature.

Introduction

Since knowledge has become one of the most important resources in societies and organisations, management sciences have been trying to explain how these resources are transformed into value for the society. The dynamic process of knowledge management in recent years has constituted the realization of social innovations, which are the basis for all innovations. Social infrastructure is also a factor supporting the effectiveness of human activity (Prahalad and Krishnan 2008, p. 6). Social environments are shaped by ethical values, which constitute superior knowledge for them, meeting the basic assumptions concerning the nature of human existence, essence of reality, and truth as well as interpersonal bonds (Shein 1996). In economic environments a practical confirmation of the significance of ethical issues is the acceptance of the Corporate Social Responsibility (CSR) concept together with its tools and standards. Transfer of knowledge related to CSR takes place both within an organisation as well as between
organisations. Clusters are typical examples of interorganizational cooperation in the areas of knowledge development, including ethics. The article present both the theoretical background behind ethical dimension of knowledge management, as well as the practical acceptance of diversified aspects of knowledge management in Polish clusters. One of the areas under research were behaviours in accordance with the guidelines of social business responsibility.

**Ethical dimension of Knowledge Management – the essence of theoretical framework**

Considering the ethical dimension of knowledge management historically, it can be noticed that explicit knowledge with its changes constituted the essence of the knowledge itself as well as conscious knowledge management. Knowledge as the effect of science development provided the sense of stability and order equated with ethical values. Since the time of Plato it has been assumed that wisdom, assuming an objective moral order, gives direction to human practical and ethical activities, provides an ability to order one’s life well, and leads to a good and happy life. (Anderson et al., 2001, p. 2009). Today’s turbulent and unstable environments, by some called a chaos (Brown and Eisenhardt 1998, Krupski 2014) encourages leaders to consider whether order exists and if it also applies to ethical issues. Surely, however, we can see that more and more knowledge is related to human activity and possessed by conscious entities, such as leaders, designers and entrepreneurs. The recent decades in the area of management sciences, defined as knowledge management, have led to the development of a number of approaches, theories and methods increasing the rationality of decision-makers’ actions as well as providing cognitive values to the researchers. Particularly significant are those theories and approaches, which show value creation in a network of interrelated elements, both people as entities of social life as well as organizations – economic, political and administrative activity entities. Quantum theory, derived from physics, has become an inspiration for strategic management, especially the so-called network approach (Stachowicz 2014). M. Wheatley argues that in social sciences the usefulness of quantum theory results from the following premises: the world is unpredictable, the observer and his intentions influence the world, what matters are the correlations between the entities, not the entities themselves (Wheatley 2006). The adoption of such assumptions implies specific feature of a leader, which increasingly emerge in management practice and are also recognised by theoreticians. M. Wheatley treats the leader as a mirror, or as a supporter of the processes by which we know our competencies and we know what interpretations of our history we’re willing to enter into. We need to make sure we know our customers, we know one another, and we know why we’re in this business or in this public sector organization (2006). Leader is therefore a key entity of knowledge management in organisation, its various contents, operates in a chaotic (from its point of view)
environment. This is the reason why such researchers as M. Romanowska (2012), R. Krupski (2014), Brown and Eisenhardt (1998) postulated the creation of new methodology in research on strategic management in organizations. T. Sedlaček – a Czech scientist, who puts forward shocking theories about the necessity to downright in a ‘biblical way’ evaluate contemporary economy, the author of the bestseller entitled ‘Economy of good and evil’ claims that economy not accompanied by maximising the good is pointless and economy deprived of morality is a zombie system (Sedlaček 2011). The author argued that ‘ethics became for the economists not interesting and unimportant. There was no need to talk about it, enough to rely on the invisible hand that the possible disadvantages (like egoism), changes into a general welfare (eg. increase productivity)’ (Sedlaček 2011, p. 197).

In recent years, one of the most influential ethical concepts in management science was ‘creating shared value’ (CSV), described by Porter and Kramer (2011). The authors argues that companies have to redefine their purposes by creating “shared value” – generating economic value in a way that also produces value for society by addressing its challenges. A shared value approach reconnects company success with social progress. CSV concept was subjected to criticism: Crane et al. (2014) argued it is not original nor new and ignores the tension between social and economic goals. The authors also noticed that the concept is naive about the challenges of business compliance, moreover it is based on shallow conception of corporations’ role in society. Despite criticism, CSV is the most important concept for practitioners in the field of ethics.

The connection between human activity and its ethical dimension is the cognitive area in sciences on morality. Nowadays leading researchers representing this stream agree on the assumption that since human life is based on action and mental processes, which always include the intention of morality behind actions (Heller 2015), by learning about and creating reality an entity establishes specific relations with the world of moral values, that is those values, which constitute the foundation of our consciousness.

At current point of knowledge development on ethical values in economy, they should not be treated as the source of limitations, but also as a valuable source of inspiration for organizational creativity, innovation and constant improvement of the offered products and services (Stachowicz 2016). In the case of conscious strategic actions of and organization, ethical values are the source of fundamental knowledge for an organization, while at the same time factors shaping cognitive processes in knowledge management.

Knowledge is complemented by wisdom. J. Rowley, who spread the hierarchical model DIKW (data – information – knowledge – wisdom) claims that knowledge is supplemented by wisdom with answers of ethical nature, the highest level of attaining the sense of truth, the sense of right and wrong, and having it socially accepted, respected and sanctioned (Rowley 2007, p. 167). Jashapara believes that ‘wisdom is the ability
to act critically or practically in a given situation. It is based on ethical judgement related to an individual belief system.” (Jashapara 2011, p. 19).

If ethical dimension is regarded as superior to knowledge resources, it must be emphasized that in network environments knowledge is of dual nature: as a consciously created entity or as autopoietic process, which can hardly be influenced. When knowledge is regarded as an entity which as a specific form of information about objective reality has its own identity, knowledge is developed, stored, transformed and used purposefully in management processes (including strategic management) as a certain form, model of an organization and as knowledge about methods of realizing this forward-looking model. On the other hand, when knowledge is regarded as an autopoietic process, researchers such as von Krogh G et al. in Poland followed by Mazur and Jaksa developed a concept of autopoietic social system, adapting the *autopoiesis* concept to the conditions in an organization, that is to processes of creation, sharing and development of organizational knowledge and knowledge created and used by entities in organizations. It was concluded that organizational knowledge leads to and is the underlying cause of an autopoietic organization as social systems. The ethical component of knowledge occurs in both approaches, yet the autopoietic process of knowledge transfer is typical of interorganizational networks and clusters and also relates to the creation and transfer of ethical knowledge in a network.

**CSR – practical implementation of ethical issues in business environment**

In business environment a practical guide in ethical behaviours is the concept and detailed methods and tools of the Corporate Social Responsibility (CSR). In the Green Paper, published by the European Commission in 2001, the following definition of CSR was proposed: ‘Corporate social responsibility is essentially a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment’ (Green Paper 2001). Social responsibility not only comes down to obeying current legal regulations, but it also responds to the ethical expectations of the society. Moreover, it takes into consideration economic, social and environmental aspects.

Implementation of the CSR concept is realisable through the use of various instruments of improving the management process – in a formal, standardized or more informal manner. Currently, the most important guide to social responsibility in organizations is the ISO 26 000 standard, which targets not only enterprises but also non-commercial organizations. Its guidelines might be used by people responsible for environmental issues, working in administration, at universities, in non-governmental organizations, regional authorities or hospitals and other healthcare institutions. Its aim is to enable the implementation of better consistency in the area of CSR thanks to specifying the areas of responsibility.
The ISO 26 000 standard defines social responsibility as an organization’s responsibility for the influence of decisions and actions on society and environment through clear and ethical behaviours which:

- contribute to sustainable development, including health and well-being of the society;
- take the stakeholders’ expectations into account;
- are consistent with current law and standards of behavior;
- are implemented in the whole organization and practiced within its sphere of influence.

Practical aspects of the ethical dimension of knowledge management in clusters

The activity of clusters in Europe is an answer to the pursued innovation policy, whose assumptions are described in the Europe 2020 strategy. In Poland these are strategies of economy development such as Innovation and Economic Efficiency Strategy (IEES) as well as governmental programs, which regardless of the political changes stress cooperation within sectors and between sectors (Ministry of Economic Development 2016). Most importantly, however, clusters are the response to the need of joint knowledge development for innovation implementation, as a positive effect of knowledge and values transfer in a network (Stachowicz and Stachowicz-Stanusch 2014). Cluster is defined as ‘a group of entities operating in a particular ecosystem shaped in a specific territory and over a specific specialization, which create the synergy effect of cooperation between environments such as business, science, authority and civil society. The basic characteristic of a cluster is a collection of formal and informal rules formed by social capital, which not only define the way in which a cluster functions but they are also established and developed based on a scope of joint enterprises (primarily including innovation), knowledge exchange and improving competence’ (Knop et al. 2013, s. 22).

In a network environment such as a cluster, we can observe how in practice knowledge ‘emerges’ through interaction between entities – cluster participants. There is no doubt that sources of new knowledge in clusters are differentiated: sometimes it is a bottom-up initiative of a member or group of members, sometimes the role of a leader arises. However, in each case new dimensions of knowledge are confirmed by communication and dialogue (Olko 2015). The significant areas are discussed socially, accepted and developed, while valueless knowledge is not discussed in society.

The most important aim of a cluster is to create an environment for effective creation and exchange of knowledge through the use of cluster members. New knowledge creation (creativity and output) and exchange takes place in circumstances which respect common ethical values and in an environment of trust among people who repre-
sent particular cluster members. In order to achieve this goal the system of knowledge management in a cluster should have the following features:

1. The ability to allocate knowledge to entities in a cluster thanks to competence and resource map (the so-called know-who).
2. The ability to ensure communication inside the cluster.
3. The possibility of supporting R&D activities of cluster members.
4. The ability to support cluster members in the area of social responsibility actions.
5. The ability to support actions connected with development of human resources of cluster members.
6. The ability to support cooperation between cluster members and the environment.

These features were verified during research on clusters in Poland, conducted in the second half of 2015. The analyses included an external analysis of fulfilling the standards of cluster management, which were introduced as an element of the realized cluster policy in Poland. Standards in cluster management should be understood as rules determining the desired features of management and functioning of cluster coordinators, including among others, the best identified practices in their activity in Poland and abroad (Piotrowski 2014).

Verification of management standards was carried out in 66 clusters representing diversified sectors and different regions of Poland. A considerable majority of the analyzed clusters (60 out of 66) were the developing clusters. In general, all obligatory standards of cluster management were met by 31 clusters, whereas in 35 clusters they were not. Nevertheless, many of them with few measures taken might in the short time lead to change in the situation in this respect. Improvement recommendations were formulated for clusters not meeting the standards, including the area of social responsibility. These recommendations referred to formulating objectives concerning social responsibility in strategic documents of the cluster (development strategy, mission, strategic objectives), undertaking actions verifying the utility of CSR rules in the activity of cluster taking into account available standards (especially ISO 26 000 standard) and finally undertaking actions for the members.

Table 1. Elements of knowledge management in the investigated clusters

<table>
<thead>
<tr>
<th>Lp</th>
<th>Knowledge management areas</th>
<th>Standard number and description</th>
<th>number of clusters meet the standard</th>
<th>number of clusters not meet the standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Competence base</td>
<td>2.3.2 Coordinator has the current database of identified resources and competences in a cluster</td>
<td>58</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Internal communication</td>
<td>3.2.1 Implementation of various tools and forms of communication</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3.2.2 Undertaking actions for integration of members</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>3.2.3 Thematic and/or working groups</td>
<td>62</td>
<td>4</td>
</tr>
</tbody>
</table>
Among the 36 standards of cluster management, we might distinguish 10 which constitute elements of knowledge management system in a cluster. They encompass 6 areas characterized in Table 1. Due to the necessity to adopt analyses on knowledge management to verification of standards, there is an imbalance in the number of indicators (standards) in particular areas. Internal communication, which is the basis of knowledge exchange in a cluster involves three standards, the areas of human resources development and cooperation with environment involve two standards while the remaining areas—competence database, R&D activity and social responsibility are defined by individual standards. Despite a little number of standards, resulting from the necessity to reinterpret the results, the presented model is a base for determining the necessary conditions (yet not sufficient) for ensuring efficiency of knowledge management processes in a cluster.

The obtained results on the level of fulfilled standards of cluster management in the area of knowledge management are collectively presented in Figure 1. The general result is given in percentage for the whole population of 66 clusters, 0% indicates no criteria met in any of the clusters, whereas 100% means all standards met in all analyzed clusters. The general level is really high and amounts to 88% in the case of possessing competence database and 98% in the case of internal communication (the most important element guaranteeing knowledge exchange among cluster members). Such a result is the consequence of deliberate choice of clusters for analysis: the selected clusters were mature, their coordinators agreed to verify the standards.

One of the knowledge management standards entirely concerns CSR and is obligatory for clusters which are at the developmental or maturity stage. In the embryonic phase its fulfillment is optional. According to this standard, marked 3.5.1, cluster and
its coordinator aim to develop human resources, including environmental protection and they build relations with the environment in everyday practice. A particular role in this case is played by the coordinator, which should realize the CSR assumptions. Meeting this standard includes fulfilling three alternative indicators:

1. In the development strategy we can find regulations concerning CSR activity connected with e.g. the creation of worker-friendly workplaces, development and implementation of new eco-friendly technologies, increasing energy efficiency, reducing the use of natural resources, organizing various social events.

2. The coordinator takes action for the promotion of CSR rules through organizing meetings of training and technological nature. Frequency, form and scale of these actions is adequate to the level of cluster’s development, represented branch as well as needs and possibilities of its members.

3. The coordinator supports the realization of actions aimed at realization of CSR rules, e.g. actions for raising awareness of CSR, obtaining external funds for thermal modernization of facilities, implementation of low-carbon technologies, reducing the use of natural resources. Frequency, form and scale of these actions is adequate to the level of cluster’s development, presented branch as well as needs and possibilities of its members.

This means that meeting any of these indicators leads to the fulfillment of 3.5.1 standard as a whole.

Fig. 1. Level of performing cluster management standards in the field of knowledge management (n=66 clusters).

Source: prepared by the authors
Detailed results of the analysis on meeting the social responsibility standard in clusters (3.5.1) are as follows:

- 59 clusters meet the 3.5.1 standard, 7 do not;
- 7 cluster coordinators (among those which have not met the standard) have not undertaken action in favor of CSR;
- None of the 66 analyzed coordinators implemented any of CSR standards, e.g. ISO 26 000;
- Almost every cluster coordinator expressed interest in the process of implementing the ISO 26 000 standard

The presented results indicate the need of implementing CSR rules and the potential related to it. However, the implementation operations in clusters might involve the same limitations and problems, which occur outside the clusters, that is individually in enterprises.

Considering the relatively high number of clusters under analysis (66 out of 203), the obtained results allow us to reckon that a cluster is a good platform for knowledge management on an interorganizational level. Due to clusters, economic operators can develop own sources of knowledge and enhance competitive advantage, also thanks to meeting the standards of social responsibility, which are the practical premises of ethical behaviors among the cluster members.

Conclusions

The presented solutions on the ethical component of knowledge management point to the fact that this aspect of knowledge is really significant, if not more important. On the level of an organization this knowledge refers to both the sphere of basic assumptions and values, as well as instrumental elements described in CSR standards. On the basis of the presented outcomes and summary of the theoretical considerations the following conclusions might be formulated:

1. Ethical dimension characteristics of knowledge management:
   a) Knowledge about ethical issues in business became an essential component of knowledge management in organizations. Ethical knowledge has strategic and operational level. On the strategic level the ethical frameworks are described, corresponding to shared values. Operational level of ethical knowledge determines the methods and techniques of implementing ethical issues in organizations.
   b) Business environments to an equal extent search for and try to develop instrumental knowledge (e.g. about technologies), as well as knowledge about social responsibility, belonging to the ethical area of knowledge management.
   c) An instrumental expression of social responsibility knowledge management, representing the operational level of knowledge management, are the standards of CSR in business, which re discussed shared and implemented on an interorganizational level.
2. Presented results of research undertaken on the Faculty of Organization and Management, Silesian University of Technology, as well as the results of discussion conducted in the article, create the good ground for the claim that formulated assumption of the new paradigm – network approach (Czakon 2011, Krzakiewicz 2013, Niemczyk 2013) are right and useful. As it was argued in many other works of the authors of this article (Stachowicz 2014, Stachowicz and Olko 2015), every human activity is formed as a result of three streams: resources streams, knowledge streams and values streams. Human activity, deliberately organized, are rooted in social relation within the social networks in organizations. In these networks the organization is shaped in static (formal) way an dynamic way appearing in the action nets (Czarniawska 2010). Value streams are as important as resources streams of human activity and knowledge streams. We can be optimistic about the future of contemporary institutions and society, including the future of undertaken ventures and projects. In the end, the practice reveals the verity that every organization, in order to be permanent and in the process of development, has to meet social needs for the common good.

Formulated thesis about the importance of an axiological component in knowledge management are related to practice and theory of strategic management. Organizations, for their survive and development must not only to learn how to adopt to the environment, but doing more: create the environment in innovative way. How we can learn by experience, effectiveness and efficiency of every kind of innovation (product, technology, managerial etc.) is closely related to some wise and social responsible solution (social innovation) directed not only toward fulfilment of the social needs but even towards improving the quality of life. Methodological development of the network paradigm can be observed in recently developed management instruments, especially strategic management: knowledge management systems, innovation management systems, contemporary project management methods.

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Diversification Strategies in the Middle Oil and Gas Companies on the International Market

Oil and gas are an integral elements of global economy. In conditions of high uncertainty price of mistakes, made while taking decisions, increases and, thereafter, the role of strategic planning becomes significant. Under the influence of global tendencies, oil refining industry is going through transformation processes, searching for new sustainable business models. Retention of current level of hydrocarbon extraction, improvement of operational efficiency of the segment, development of high level of oil refining and petrochemistry and volume increase in supply of products with high added value are priority tasks of oil and gas companies. Therefore, current state of oil and gas industry requires a thorough review of strategic guidelines, implementation of new technological solutions and effective management systems.

The modern world, by right, assigns a part of a driving force of world economy to an oil and gas industrial complex. Budgets of the countries are created due to mining. Oil and gas provide activity of almost all industries of national economy. Development of the extracting sector supply economic, political, social stability in society. Undoubtedly, correctly verified and successful business model a basis of functioning of any entity, but effective strategic planning in the extracting and oil-processing industry is represented significant, in connection with feature of a provision of hydrocarbons in the world market. Strategic mistakes cost very much to oil and gas companies, creating prerequisites of a set of negative economic, political, social processes in society, including pose threat for an ecological safety.

With all confidence it is possible to speak about complexity of tasks of development and an efficiency evaluation of strategic planning, in view of its integration.

Development of strategy is difficult and many-sided process which is understood as search of the directions of development of activities, the choice of the markets, at-
traction of resources and methods of sales of goods in the market. In scientific works strategy formulation models are widely described.

The main direction the analysis of possible strategy of diversification of development of medium-sized oil and gas companies in the international market is submitted. Development of strategic model of diversification of medium-sized oil and gas company will allow to reveal opportunities for development of the entity in the conditions of an unstable economic situation. Carrying out the analysis gives an opportunity to approach closely strategy development process, proceeding in small independent oil companies.

The modern economic world in which oil and gas companies conduct the activities are characterized by extreme degree of instability and uncertainty. That is manifestation of an economic crisis on a global scale. Stable development of oil and gas companies in these conditions depends only on opportunities of the companies to predict and to answer flexibly to a fast changing external situation. Deduction and acquisition of competitive advantages in fight for a market position is a main goal of the companies. Creating the innovative development strategy, the companies are able to afford to maneuver in the conditions of the weak market and to switch the activity from one direction to another. Thus, it is very important to oil and gas companies to realize flexible and effective strategy in the conditions of crisis.

The main points in forming of entity strategy are: field of activity, strategic objectives and priorities, features of competitive advantages. In an oil-and-gas sector it is possible to allocate increase in amount of oil production, increase in resource base, a net profit of the company, capitalization of revenue. Often scientists pay attention to questions of the risk connected with development of strategy of the company. As such, the oil and gas industry represents an ideal example of high-risk business. From emergence of commercial oil production there was an uncertainty whether the well will give oil or there will be empty. In the current global environment, an important role is played by the instability of the market connected with volatility of oil prices. In such market it is necessary to consider risks as key factors of possible failures.

The concept of strategy is closely connected with a concept of a business model. This term is understood as a profit earning method from activities of the company in the market. The interrelation of a business model of the organization with an economic part of strategy is explained by a ratio the income, expenses, profit. That is with planned and actual targets of profitability from sale of goods of the company, with a cost structure, income level, with competitive strategy, return on investment and flows of profit. The model of business of the company provides performance excellence of strategy at the financial level. Therefore, concept of strategy of business wider, than business model.

Strategy is understood as methods of the competition and business of the company, and the model of business ensures functioning of the organization on the basis of the indicators of profit and expenses received as a result of application of this strategy.

World oil and gas companies can be divided into several categories actually: the multi-national oil and gas companies (MNOGC), state oil and gas companies and the
independent companies (in a form of the organization of business with division on private and state), the small and medium-sized oil and gas companies which aren't carrying to the state and to the vertically integrated oil and gas companies.

The international oil and gas companies, so-called “majors” are the large multinational oil and gas companies using the international approach in search of the foreign markets in case of production placement. Such companies in the strategy place emphasis on global approach to the organization of business, create the complex global management philosophy implying work not only in the house market but also beyond its limits.

Multinational corporations as a rule differ in high extent of integration and diversification. As a part of such companies the subsidiary companies allowing to perform to majors a complete cycle of oil business surely enter: investigation – production – transportation – conversion – sale of oil products. It is possible to carry chemical and petrochemical products, power industry, collection and conversion of associated gas, use of own tankers for transportation to additional spheres of diversification, and also content of the park of tanks.

In developed to an economic situation, the companies are forced to pass to complete integration of production as most successful business model. As only presence in the market, gives to the companies the chance to maximize value added of a ready-made product.

On business scales, the largest state oil and gas companies not strongly yield to multi-national oil and gas companies, however don't possess so high extent of diversification as multinational corporation. As a rule, the national companies cover a complete cycle of oil and gas business “from a well to a filling station”, but some give sales functions to the intermediary companies (traders).

National oil companies work at the same markets, as multinational companies, often use the same technologies, however on the level of efficiency lag behind multinational corporation. Such result of activities is caused by the fact that state-owned companies are guided, owing to need of filling of the budget of the country, by short-term objectives, passing important tasks of long-term planning. As a rule, the current conservative approach to management of state-owned companies reluctantly perceives need of upgrade at all production phases. Having large supplies, NOCs not always allow to invest means in production for maintenance of high employment in the country.

The foreground of NOC in the world market was found only by the beginning of 21 centuries. Now, more than a half of world oil and gas extraction falls to the share of such companies. By 2030 on the world scene a special role will be played by NOCs of the countries – net oil importers from among developing countries. The Chinese companies which have strong positions in fight for access to perspective foreign projects will be considered as main competitors of MNC.

The special niche is occupied by the companies formed by the largest financial and industrial groups, such as: Mitsubishi in Japan, Samsung and Hyundai in South Korea.
The independent companies can be divided into two categories from the point of view of domination of the equity:

The private independent companies – completely on self-sufficiency, without support of the state. The companies of the USA, Canada and Great Britain belong to this category.

The state-owned independent companies – use the help from the authorities. It is possible to refer all other companies of oil-producing countries to this category.

It is important to notice that Russia which is traditionally controlling the oil industry of economy needs to be carried to the first group as recently nature of liberalism in control of the independent companies is shown.

Such type of the companies is known less, than oil giants majors. However small and medium-sized oil and gas companies have huge influence on economy of an oil-producing country.

In the oil and gas sphere it is rather difficult for small and medium business to compete with vertically integrated corporations. The market at which I work as VIOC considerably differs from the market of small and medium-sized oil and gas companies. The main niche for them this work and rendering services in that sphere where it isn’t interesting to large players to do business.

First, the small companies I work with small fields, and also hardly removable inventories. Such fields can be in property of the small companies or to be the rented large companies. Development of the new or refrigerated wells includes not only repair and servicing, but also installation of newer equipment, that is upgrade. It is possible to carry careful attitude to the nature, and correct utilization of hydrocarbons to a benefit of work of the small companies.

The state can draw a conclusion on need to support small business in the sphere of oil and gas. Many companies can’t celebrate with monopolists, much lack financing. But one of the main problems can designate not adapted fiscal regulation from the state. In many countries small and medium-sized oil and gas companies realize a set of state programs including on implementation of innovations. Rich fields are allocated for increasing the equity.

Success of the Russian oil companies in 2014 is, certainly, achievement of national economy. Nevertheless maintenance of positive dynamics requires attraction of creative capacity of the oil companies, federal executive bodies, and also communities of experts and industry consultants for development of measures which would allow to function at this conjuncture.

Conclusion

An important role in world economy is played by an oil and gas industrial complex. For the last several honeycombs of years “black gold” made some countries superstates, filling up the budget of the country due to mining. Oil and gas are an indivisible ele-
ment of world economy. In the conditions of high uncertainty the price of mistakes in case of decision making increases, and, respectively, there is crucial a role of strategic planning. Under the influence of global tendencies, the oil processing industry endures processes of transformation in search of new viable models of business.

One of priority tasks of oil and gas companies is deduction of the current level of production of hydrocarbons, increase in operating efficiency of sector, development of advanced processing of oil processing and petrochemistry and increase in supply rate of products with a high value added. With respect thereto, the current status of an oil and gas industry requires deep review of strategic reference points, implementation of new technology solutions and effective management systems.

Availability of accurately formulated strategy distinguishes the successful companies from the others. Sustainable development of the companies in the long term depends on their capability to predict and to react flexibly to fast changing conditions of an external environment, to hold and purchase new competitive advantages in fight in the markets.

At present, when the world economy after deep recession is on the threshold of growth and is characterized by the outlined revival, fight for competitive advantage will be started with a new force and at qualitatively new level.

**Bibliography**


Resource flexibility has become one of the major problems in modern management. Companies which can achieve flexibility are increasing their competitive advantage. Article present results of research made in ten companies from service sector. Broad interviews with high managements of this companies allowed to show perspectives implementation flexibility in SMEs. Article presents what can be made in selected companies to gain competitive advantage based on flexibility.

Empirical research in management sciences

Empirical research in management sciences play an extremely important role. In shaping the methodology used in the management sciences significant impact had Karl Popper. In his assumptions scientific theory must fulfill the condition of falsification. This means that it is possible to propose an experiment to allow the overthrow the theory. According to Popper, also in social and economic sciences this condition must be met. He believed also that theories should be based on objective measurable data. Management science can develop both in the epistemological fundamentalism as well as not fundamentalist. The first one can be considered as a model of objective knowledge, while the other, closer to the practice of management [Sulkowski, s.281, 2013]. In the case of management sciences, which are part of the social sciences, empirical and practical [Sulkowski, p. 117, 2013] problem is a very broad spectrum of issues affecting the business. Management is an interdisciplinary science focusing on a knowledge of economics, psychology, sociology, ergonomics, mathematics. L. Sulkowski lists four areas and fields that have an impact on management science, that is: technical, economic, natural and humanities. Effects of other sciences in management and adaptation in enterprises can be seen in the development of management schools. From Scientific Labor Organization [Taylor 1911; Gantt 1910; Gilbreth 1917] which is focused on
measurable aspects of performance, through behavioral school where is driven attention to the human aspect of an organization and its vital importance for the proper functioning of the enterprise [Weber, 1946; Mayo 1933; Selznic, 1957; Crozier, 1967] by the quantitative school which uses a quantitative knowledge of mathematics, forecasting and simulation to predict future events [Marshall, 1890; McKinsey 1924; Kosiol 1934; Baumol 1959] to the modern approach with a synthesis of knowledge gained over the last century with such different fields and using this experience gained to solve contemporary problems.

Because of its complexity, management requires utilization of a wide range of research methods to adequately respond to the posed hypotheses. Four basic types of methods which are the subject of methodological reflection are: pragmatic, empirical, formal and understood. [Ostasz, s.11-17, 1999]. Management methodology combines learning goals and practical goals [Gill, Johnson, 1997]. Therefore in this science are used both quantitative and qualitative, retrospective and prospective research and uses the theoretical knowledge and practical.

A study conducted by the author take the form of a structured questionnaire. The answers were given by thirty people from the high and the highest level of management. Those who responded to the questionnaire were chosen by convenient selection. This made it possible to reach people with a lot of information about functioning of the organization and strategic actions undertaken by these organizations. Respondents were divided in such a way that the study involved ten representatives of service companies, manufacturing companies and retail companies. This enabled the comparison of results between different sectors. Therefore this article is focused only on service companies. The questionnaire consists of both open questions and closed. Respondents answered twenty questions divided into three categories: corporate strategy, risk, corporate resources.

Limitations of research

With regard to the research, you can extract the following limitations of research:

- Time
- Spatial
- The number of objects
- Type of examination

Time constraints due to the limited research opportunities in the long term. This restriction, however, enables you to compare the surveyed companies in similar macro-economic, political, socio-cultural and technical environment. Space limitations arise from the assumptions of research. For the author it was very important to get direct access or the closest reach to the respondents. It consisted in the fact that the questioned individuals are the highest managers in the surveyed companies and for the correctness of the study was necessary to obtain precise answers to the questions both quantitative
and qualitative. Therefore, the author was forced to narrow the space for those regions where it had the greatest access to the data. The number of objects results from the assumption that the key factor is to obtain a comprehensive response from the highest possible managers having knowledge of the strategic information. This assumption is due to the limited access to the right people. It forced to reduce the amount of the respondents. Accordingly, the test was carried out under 30 companies, 10 companies in each sector.

Type of research had to be the same for each undertaking that the data obtained are comparable. It is assumed that the best solution would be to carry out a structured interview with the high leadership of the surveyed companies. Questionnaire structured interview consists of both open questions and closed.

**Prospective possibilities of using empirical research in service enterprises**

**Human resources**

Analysis of prospective resources include a description of the current state of the characteristics of the resources, analysis of the links inside of resources, selection of the most important characteristics and confronting them with the analysis strategy. Analysis of the results is divided into two stages. The first one is to demonstrate the relationship between the characteristics presented in the study, the second one is Pareto analysis. It indicates the most important characteristics. A two-step analysis of the results indicates that the elements of the utmost importance are [see Table 1]: skills, experience of staff and the use of flexible forms of employment. Results of the questionnaire relating to the characteristics of human resources are among the most aligned among all types of resources. The results, which are a small sample, do not allow their extrapolation here, the analysis refers only to the surveyed companies. Analysis of links shows that the greatest strength of ties occurs in the first four characteristics. Three of them relate directly to the skills and knowledge of employees. This show what the employer expects of employed persons, and are omitted characteristics related to human resources management. The result can be interpreted as a passive attitude of the surveyed companies in this field, focusing on what the company can be obtained and not on what could improve. Only one element, among the most relevant that applies to other aspects of human resources is the use of flexible forms of employment. This element indicates that the company is targeted to high staff turnover, and obtaining a lower fixed costs.

The combination of the superiority of skills and experience with the use of flexible forms of employment on education and knowledge, and such characteristics as: the level of job satisfaction, opportunities for employees and motivation levels gives grounds to conclude that the surveyed companies are focused on the short term, on the performance of relatively simple orders and to maximize the profit on the basis of their
skills. The surveyed companies do not show a willingness to invest in staff and programs aimed at the objective of reducing staff turnover while increasing productivity.

**Recommendations**

Based on the data obtained, the author shows the low importance of the characteristics directly related to enterprise management, such as staff motivation, the impact on low turnover or opportunities for employees within the organization. The surveyed service companies in formulating corporate strategy take into account: changes in local markets, regulatory change, the desire to reach their goals, strengths and weaknesses of the company. Linking strategy, which is a synthesis of short-term actions to maintain its position and to adapt to changing situations diagnosed with the meaning of the characteristics of human resources confirms the belief that the surveyed companies in the long run can feel lack of long-term development plan. The surveyed service companies in terms of the characteristics of human resources should pay greater attention to the management of the company in this aspect, because at this point they are vulnerable to losing employees due to falling unemployment and rising wages. This may expose the company investigated the inability to adapt to the new situation.

*Source: prepared by the author*
<table>
<thead>
<tr>
<th>Source: prepared by the author</th>
</tr>
</thead>
</table>

| Table 1. Process of determining key factors for the human resources in the service companies group. |

<table>
<thead>
<tr>
<th></th>
<th>Skills</th>
<th>The experience of employees</th>
<th>The use of flexible forms of employment</th>
<th>Education and knowledge of workers</th>
<th>The level of employee motivation</th>
<th>The level of internal rotation of employees</th>
<th>Career opportunities for workers in the enterprise</th>
<th>The level of employee satisfaction with their work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>21,5</td>
<td>17,2</td>
<td>16,5</td>
<td>16,4</td>
<td>14,8</td>
<td>11,6</td>
<td>11,6</td>
<td>10,2</td>
</tr>
<tr>
<td>experience of employees</td>
<td>17,2</td>
<td>-4,3</td>
<td>0</td>
<td>0,7</td>
<td>0,8</td>
<td>2,4</td>
<td>5,6</td>
<td>5,6</td>
</tr>
<tr>
<td>The use of flexible forms of employment</td>
<td>16,5</td>
<td>-5</td>
<td>0,7</td>
<td>0</td>
<td>0,1</td>
<td>1,7</td>
<td>4,9</td>
<td>4,9</td>
</tr>
<tr>
<td>Education and knowledge of workers</td>
<td>16,4</td>
<td>-5,1</td>
<td>-0,8</td>
<td>-0,1</td>
<td>0</td>
<td>1,6</td>
<td>4,8</td>
<td>4,8</td>
</tr>
<tr>
<td>The level of employee motivation</td>
<td>14,8</td>
<td>-6,7</td>
<td>-2,4</td>
<td>-1,7</td>
<td>-1,6</td>
<td>0</td>
<td>3,2</td>
<td>3,2</td>
</tr>
<tr>
<td>The level of internal rotation of employees</td>
<td>11,6</td>
<td>-9,9</td>
<td>-5,6</td>
<td>-4,9</td>
<td>-4,8</td>
<td>-3,2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Career opportunities for workers in the enterprise</td>
<td>11,6</td>
<td>-9,9</td>
<td>-5,6</td>
<td>-4,9</td>
<td>-4,8</td>
<td>-3,2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The level of employee satisfaction with their work</td>
<td>10,2</td>
<td>-11,3</td>
<td>-7</td>
<td>-6,3</td>
<td>-6,2</td>
<td>-4,6</td>
<td>-1,4</td>
<td>-1,4</td>
</tr>
</tbody>
</table>

Source: prepared by the author
**Tangible resources**

The most significant characteristics of the material resources are: the adequacy of the location, the functionality of office space, modern computer equipment, availability of premises for rent and up to date software.

Elements of by far the least importance are: the possibility of storing the goods, expandability headquarters organizations, specialized equipment and the versatility of machines and equipment. Analysis of material resources showed that most links exist between: adequacy location, functional office space, modern computer hardware and software actuality. In the analysis of Pareto Sheet These four account for 75% of all connections in the whole group of characteristics of the material resources. These results indicate that the surveyed companies are primarily focused on the local market, hence such a high score adequacy location. In the case of companies with regional importance or regional over this factor would be less important. Respondents also noted the importance of the functionality of office space and modern computer hardware and software updates.

These factors, suggests that surveyed companies are focused on jobs which requires first of all modern computer equipment with the current software. The surveyed companies focused on their responses to those characteristics that can be associated with relatively small companies, which for the implementation of its activities do not require large facilities such as an extensive machine park. All the characteristics associated with the production and logistics in this case are far less important. Elements such as the availability of transport and expandability organization’s head office from the perspective of the surveyed companies are of marginal importance.

**Picture 2. Asymmetry of key factors of tangible resources in service companies**

Source: prepared by the author.

**Recommendations**

The author based on the analysis of the characteristics of the material resources indicates small-scale business companies reflecting on the perception of the importance
Resource Flexibility in Selected Service Enterprises...

The surveyed companies are focused on the local market, or on the orders having the nature of an intellectual who is not a limited space and logistical needs. At this point there is no indication that companies will need to invest in resources and equipment. The specificity of industries in which companies operate do not require them to be here all changes made.

Table 2. Process of determining key factors for the tangible resources in the service companies group.

<table>
<thead>
<tr>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
<th>Adequacy location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequacy location</td>
<td>17.2 12 11.4 10.4</td>
<td>7.8 7 5.4 2</td>
<td>1.6 1</td>
<td>0 1</td>
<td>0 0.6</td>
<td>0 0.9</td>
<td>1.6</td>
<td>0 0.3</td>
<td>1 3.6</td>
<td>4.4</td>
<td>6 9.4</td>
</tr>
<tr>
<td>The functionality of office space</td>
<td>12 -5.2 0 0.6</td>
<td>0.9 1.6</td>
<td>4.2 5</td>
<td>6.6</td>
<td>10 10.4</td>
<td>39.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern hardware</td>
<td>11.4 -5.8 -0.6 0</td>
<td>0.3 1</td>
<td>3.6</td>
<td>4.4</td>
<td>6 9.4</td>
<td>9.1 39.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to date software</td>
<td>11.1 -6.1 -0.9 -0.3</td>
<td>0 0.7</td>
<td>3.3</td>
<td>4.1</td>
<td>5.7 9.1</td>
<td>9.5 32.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The availability of housing for rent</td>
<td>10.4 -6.8 -1.6 -1</td>
<td>-0.7 0</td>
<td>2.6</td>
<td>3.4</td>
<td>5 8.4</td>
<td>8.8 28.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The availability of transport</td>
<td>5.4 -11.8 -6.6 -6</td>
<td>-5.7 -5</td>
<td>-2.4 -1.6</td>
<td>0 3.4</td>
<td>3.8 7.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The possibility of storing the goods</td>
<td>2 -15.2 -10 -9.4</td>
<td>-9.1 -8.4</td>
<td>-5.8 -5</td>
<td>-3.4 0</td>
<td>0.4 0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: prepared by the author.
Financial resources
Analysis of financial resources indicates the dominance of a single characteristic ie. the availability of own sources of financing. Pareto analysis also showed that the second most important characteristic is the balance between the funds allocated for the project and the measures detainees. This reflects the conservative financial strategy of the surveyed companies, or lack of willingness to invest in the near term. The surveyed companies do not have the need to access to the external sources of financing. Very strong position of availability to its own sources of funding suggests that companies focus on current operations, not requiring large expenditures. Enterprises avoid debt preferring to focus on their own sources of funding. They do not need to take the risks associated with lending to investment, or do not see at this point the potential development directions require significant investment. Financial conservatism can also be seen in the second characteristic, which is strongly linked with access to its own sources of funding. These two elements are consistent with each other. This is evidenced by the implementation of a strategy for not taking risks and to focus on current operations. Among the characteristics of having the least importance among service companies was the ability to liquidate both intangible and tangible assets. What is important, intangible assets were higher than the material which shows that the surveyed companies are more focused on providing intellectual value than material values.

Recommendations
In the absence of a willingness to invest in the near future by the surveyed companies used the strategy seems to be right. It focuses on providing current liquidity without increasing risk.

**Picture 3. Asymmetry of key factors of financial resources in service companies**
In case when companies had need to expand it will be necessary to change the structure of corporate financing, increasing access to borrowed capital of funding for the financing of major investments planned by the company.

Table 3. Process of determining key factors of the financial resources in the service companies group.

<table>
<thead>
<tr>
<th>Availability of own sources of financing</th>
<th>The balance between the resources allocated to investments and measures detainees (as a financial surplus)</th>
<th>Receivables</th>
<th>The level of debts with suppliers</th>
<th>Availability of external financing</th>
<th>The value of cash on hand</th>
<th>The ability to liquidate intangible assets (e.g., Patents)</th>
<th>The ability to liquidate assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of own sources of financing</td>
<td>23</td>
<td>14</td>
<td>13,2</td>
<td>11,4</td>
<td>9,6</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>The balance between the resources allocated to investments and measures detainees (as a financial surplus)</td>
<td>14</td>
<td>-9</td>
<td>0</td>
<td>0,8</td>
<td>2,6</td>
<td>4,4</td>
<td>5</td>
</tr>
<tr>
<td>Receivables</td>
<td>13,2</td>
<td>-9,8</td>
<td>-0,8</td>
<td>0</td>
<td>1,8</td>
<td>3,6</td>
<td>4,2</td>
</tr>
<tr>
<td>The level of debts with suppliers</td>
<td>11,4</td>
<td>-11,6</td>
<td>-2,6</td>
<td>-1,8</td>
<td>0</td>
<td>1,8</td>
<td>2,4</td>
</tr>
<tr>
<td>Availability of external financing</td>
<td>9,6</td>
<td>-13,4</td>
<td>-4,4</td>
<td>-3,6</td>
<td>-1,8</td>
<td>0</td>
<td>0,6</td>
</tr>
<tr>
<td>The value of cash</td>
<td>9</td>
<td>-14</td>
<td>-5</td>
<td>-4,2</td>
<td>-2,4</td>
<td>-0,6</td>
<td>0</td>
</tr>
<tr>
<td>The ability to liquidate intangible assets (e.g., Patents)</td>
<td>6</td>
<td>-17</td>
<td>-8</td>
<td>-7,2</td>
<td>-5,4</td>
<td>-3,6</td>
<td>-3</td>
</tr>
<tr>
<td>The ability to liquidate assets</td>
<td>4,2</td>
<td>-18,8</td>
<td>-9,8</td>
<td>-9</td>
<td>-7,2</td>
<td>-5,4</td>
<td>-4,8</td>
</tr>
</tbody>
</table>
Other resources

The most important among other resources are: the company’s reputation in the market, the efficiency of processes, management information, enabling identification of risks and opportunities arising from the environment, organizational structure which gives leeway to employees and a positive image of the employer. Two of the above mentioned characteristics are related to the image of the company and two to the management. For the surveyed companies most important characteristic is reputation on the market. This is all the more important for investigated companies because of their focus on the local market, where this element plays an even greater role. Reputation in this situation may be a factor that can allow to maintain a competitive advantage, or when it is broken can lead to bankruptcy. It is not surprising, therefore, that it is precisely this element that has been indicated as the most important characteristics of this group. The positive image of the employer, which is the result of the company’s reputation on the market and the action taken in the field of marketing plays an increasingly important role, allowing companies to gain a market advantage. Analysis of the characteristics of human resources, pointed out that the surveyed companies are focused largely on flexible forms of employment and less focused on actions to increase staff motivation and implementations of tools for personnel development. Positive image makes it easier to find workers, with high turnover of stuff it is desired asset. It also allows to reduce the costs associated with the recruitment process. Shorten the time needed to find the employee and increases the chances of finding a candidate that will meet requirements. Characteristics associated with the process of business management are consistent with each other. They focus on increasing the flexibility of the company by reducing the time needed to make a decision. The efficiency of the processes of management information, enabling identification of risks and opportunities of the environment allows for rapid, anticipatory response to changes in the environment. This gives opportunity to minimize losses due to the risks and maximize the benefits of emerging opportunities. The organizational structure which gives leeway to employees also increases the flexibility of the company. To a large extent relieves executives from making decisions that may be taken by employees. Often they have more knowledge and their decisions can be more accurate. The management, in turn, can concentrate on the activities of a strategic nature, without wasting time for making simple decisions and transfer them to individual employees. The surveyed companies focus on the appropriate use of resources, they offer the possibility of participating employees as possible try to respond quickly to the changing environment and pay special attention to the aspect of image enhancement, both outside and inside of the company.

Recommendations

Among the recommendations should be include a positive opinion on the current focus on the factors that are essential for the functioning of enterprises, directly affecting the gain and maintain a competitive edge.
Among the suggestions for the future functioning of enterprises, it is worth noting that companies should consider placing greater emphasis on creating a distinctive organizational culture and improving the learning processes of the organization. The first one is related to the first set of characteristics associated with the image. Expressive organizational culture can improve both the company’s reputation in the market as well as strengthen the positive image of the employer, obtaining effect of synergy. Improving the processes of organizational learning would allow companies even faster operation, which will also strengthen the already existing desire to create a structure giving freedom to their employees as well as would facilitate the process of informing the management of opportunities and risks.
Table 4. Process of determining key factors of other resources in the service companies group.

<table>
<thead>
<tr>
<th>Company's reputation in the market</th>
<th>The efficiency of the processes of management information, enabling identification of risks and opportunities of the environment</th>
<th>The positive image of the employer</th>
<th>Processes of organizational learning</th>
<th>Existing relationships with other organizations</th>
<th>Expressive organizational culture</th>
<th>Immutability of the mission and vision of the organization</th>
<th>Supplier access</th>
<th>Possibility of selling intangible assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company's reputation in the market</td>
<td>22,5</td>
<td>19,5</td>
<td>17</td>
<td>16,8</td>
<td>15</td>
<td>13,6</td>
<td>9,9</td>
<td>7,4</td>
</tr>
<tr>
<td>The efficiency of the processes of management information, enabling identification of risks and opportunities of the environment</td>
<td>19,5</td>
<td>-3</td>
<td>0</td>
<td>2,5</td>
<td>2,7</td>
<td>4,5</td>
<td>5,9</td>
<td>5,9</td>
</tr>
<tr>
<td>The positive image of the employer</td>
<td>17</td>
<td>-5,5</td>
<td>-2,5</td>
<td>0</td>
<td>0,2</td>
<td>2</td>
<td>3,4</td>
<td>3,4</td>
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<tr>
<td>Processes of organizational learning</td>
<td>16,8</td>
<td>-5,7</td>
<td>-2,7</td>
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<td>Existing relationships with other organizations</td>
<td>15</td>
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<td>-4,5</td>
<td>-2</td>
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<td>1,4</td>
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<tr>
<td>Expressive organizational culture</td>
<td>13,6</td>
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<td>-5,9</td>
<td>-3,4</td>
<td>-3,2</td>
<td>-1,4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Immutability of the mission and vision of the organization</td>
<td>13,6</td>
<td>-8,9</td>
<td>-5,9</td>
<td>-3,4</td>
<td>-3,2</td>
<td>-1,4</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Supplier access</td>
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<td>-9,6</td>
<td>-7,1</td>
<td>-6,9</td>
<td>-5,1</td>
<td>-3,7</td>
<td>0</td>
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<tr>
<td>Possibility of selling intangible assets</td>
<td>7,4</td>
<td>-15,1</td>
<td>-12,1</td>
<td>-9,6</td>
<td>-9,4</td>
<td>-7,6</td>
<td>-6,2</td>
<td>-2,5</td>
</tr>
</tbody>
</table>

Source: prepared by the author.
Summary

Research showed which aspects of management are most important in the examined companies. In this case companies are trying to keep low cost, they are not rapidly expanding and having conservative financial policy. This means that this companies are not willing to invest in new technologies or any other business which can be seen as risky. In the fields in which companies are operating they are doing decent effort to obtain competitive advantage, but lack of experience and willing to change in near future can affect their businesses.

Bibliography
FDI in the Smaller Economies of The European Union

Introduction

In the global economy, FDI has grown rapidly in recent years as financial markets became increasingly integrated and policy and political barriers everywhere were at least partially dismantled. Economic liberalization in all geographic regions attracted new inflows of FDI and potential host economies welcomed and competed aggressively for FDI. Global inflows in 1992 were only 166 billion dollars but twenty years later reached approximately 1.33 trillion dollars. In 2013, annual FDI inflows were 1.45 trillion, accelerating again despite evidence of a slowing global economy. FDI flows into the EU during the period of this study, 1993 to 2013, were somewhat volatile given the changing regional economic environment, the enlargement of the EU in 2004, and the global financial crisis of 2008. From 1993 through 2000, inflows grew each year, peaking at 703 billion dollars in 2000, and then declining annually until 2005. With the enlargement of the EU to 25 countries in 2004 and favorable regional and global economic conditions, FDI reached $864 billion in 2007. However, the global financial crisis and growing economic slowdown within the EU, especially the Eurozone, led to annual inflows falling to $246 billion in 2013. Overall, global FDI inflows peaked at 2 trillion dollars in 2007 and have averaged approximately 1.5 trillion from 2008 through 2013. (UNCTAD, 2014).

Economic restructuring and growth in the major recipient and investing countries, more efficient global capital markets, and continued economic transition and political stability in emerging economies strongly influenced investor behavior and strategy. In summary, the acceleration of FDI has been fueled by the increasing globalization by transnational organizations of their production networks, the policy liberalization of host countries regarding FDI in most sectors, growth in cross-border mergers and acquisitions, and the expanding investment opportunities in regionally integrated markets and newly privatized sectors in both advanced and developing economies.
The economic and financial crisis, which developed in 2008, did have an immediate negative impact on 2008 and 2009 foreign direct investment inflows, however annual global FDI inflows recovered quickly in 2010. The global pattern of FDI throughout the period of this study has been dominated by the developed economies and OECD countries. The developed economies led by the “triad” of the U.S. Japan, and the European Union accounted for approximately 65% of FDI inflows in 2007. In 2008, record inflows of FDI into developing nations were reported ($630 billion) but the “triad” still dominated both as a home and host nations of new FDI. However, by 2013, the developed economies share of global FDI inflows had fallen to about 40%. The EU as a region was the largest recipient of FDI inflows during the period of this study with the United States and more recently China being the largest country recipients of FDI. The allocation of FDI by foreign investors strongly favored the larger EU members, particularly the UK, Germany and France. However, since the EU enlargement in 2004 and 2007, with 12 new member countries, the relative share of FDI inflows in these three countries has fallen as the relative share of the “new Europe” accession countries has increased.

This paper examines the patterns and the economic determinants of FDI in Hungary and Slovakia for the period 1993 to 2012, during their transition to market driven economies and their accession to the EU in 2004. The period begins with the independence of Slovakia as a result of the peaceful division of Czechoslovakia in 1993 and encompasses the introduction of the Euro in 2009, the first year of the EU enlargement 2004, and in 2008 and 2009, the peak years of the global financial crisis. Hungary also joined the EU in 2004 but has remained outside the Euro zone. Of course, one cannot assume causality but the raw data confirms some impact on FDI from these unique events. Both countries by population and GDP are among the smaller members of the EU and share a similar history and culture, a peaceful transition from a Communist regime to greater democracy, and a central location in the heart of Europe. Each began the process of political independence from the Soviet Bloc and economic liberalization and transition in 1989. They also share a large border and strong economic ties to both Western and Eastern Europe. However, an important difference is that Hungary has remained outside the Euro zone while Slovakia joined the Euro zone in 2009. Since 2010, the economic and financial crisis in the EU and the general global economic slowdown have had a negative impact on FDI in the entire region. Hungary has been in recession since 2010 and faced both a banking and political crisis. Slovakia has maintained political and banking stability and positive although modest economic growth through these years but has experienced rising unemployment. Past studies of investment in the EU confirm that economic integration into the EU and the Single Market Act had a positive impact on FDI in the larger economies and subsequently in 2004 on the smaller accession countries but also suggest that the introduction of the Euro and the expansion of the Eurozone may have had a more uncertain impact on the share of FDI inflows among the
member countries. To more fully analyze and compare the experience of Hungary and Slovakia, this paper applies different FDI models to both countries and suggests some economic and policy implications for similar economies competing for FDI with much larger regional economies.

Economic and policy environment

The Slovak and Hungarian economies during the years of this study generally performed well in terms of GDP and growth in trade and national income. Significant economic growth occurred in the period of economic liberalization and trade openness in the nineties during the transitions to a market based economy oriented to Western Europe. Economic transition and growth was accelerated through increased inflows of FDI following the accession of both countries to the EU in 2004, along with other central European and Baltic economies. Full membership for Hungary and Slovakia brought in great amounts of EU institutional capital inflows through access to the structural funds provided by the EU for infrastructure development and educational projects in the public and NGO sectors. Private capital inflows through FDI from Western Europe primarily and from the United States as well increased during the period of this study fueled by economic liberalization and EU membership. There was little impact in both countries from the moderate global economic slowdown in the early nineties and in 2000 but the global crisis of 2008–2009 had a more significant impact on reducing the annual growth rate of GDP and the inflow of FDI. The global financial crisis and the resulting recession which hit many EU countries also created a recessionary environment in Hungary and Slovakia and did generate an extended decline in FDI inflows, with some recovery in 2011. In fact, both country experienced a decline in real GDP and slipped into recession in 2009 but economic growth accelerated and was positive in 2010. Trade flows for the entire period, as measured by export and import values rose each year after EU accession with only a moderate slowdown since 2009. The decision by Slovakia to enter the Eurozone in 2009 and the decision by Hungary to retain the florin and not seek Eurozone membership seems not to have significantly impacted FDI inflows and their regional and sectoral allocation (IMF selected volumes, IFS Yearbooks).

During the period of this study, the economy of Hungary grew significantly until 2007. From 1993 until 2007, real GDP grew at an annual average rate of approximately 4% However in 2007 and 2008, economic growth rates declined to less than 1% and in 2009, as a result of the global and EU financial crisis and slowdown, the economy experienced a severe recession as the growth rate was a negative 6.8%. Since then, economic growth, has averaged about 1% a year with a moderate recession in 2012 (World Bank Annual Report, 2014). The lingering impact of the economic crisis for Hungary has been exacerbated by more selective and restrictive policies on FDI and a slowed pace of economic liberalization. Domestic economic problems and high budget deficits and
public debt, led to more restrictive fiscal policy including tax increases and the new conservative government in 2010 has shifted toward more state regulation and intervention. The result has been mixed messages to foreign firms and investors creating policy uncertainty and an emerging image problem (Vale Columbia Center Report, 2012), although statutory corporate tax rates are regionally competitive at approximately 19%. With a population of 10 million, per capita GDP in purchasing power terms went from 12,500 euro equivalent to 17,200 in 2013, still lower than the average for all other central European economies.

The data on annual FDI inflows from 1993 through 2013 reflect the economic and policy environment of volatility and uncertainty. Hungary from 1993 to 2008 was one of the leaders in Central Europe in attracting FDI through rapid economic liberalization and privatization, peaking at 7.7 billion dollars in 2005. However, as with other countries in the region, FDI inflows declined significantly to 2 billion dollars in 2009 and 2.3 in 2010 but in 2011 annual FDI recovered to 6.3 billion. Preliminary data estimates annual FDI inflow to be approximately 3.1 billion in 2013 (World Investment Report 2014, UNCTAD). Hungary was the first country in Central Europe to open its economy to FDI but has since lost relative market share of FDI in Central Europe, particularly to the Czech Republic and Poland. In the early years of liberalization, market seeking FDI dominated but since 2000 and particularly after accession to the EU in 2004 efficiency seeking and export oriented FDI has become more important.

However a more restrictive regulatory environment may make Hungary a less attractive Central European host for future FDI.

Slovakia’s economy and business environment during the period of this study experienced much of the economic volatility and policy uncertainty as other countries in the region, such as Hungary. In 1993, the former Czechoslovakia peacefully transitioned into the independent countries of the Czech Republic and Slovakia. The separation was smooth and relatively painless from a policy and economic perspective. The shared history and strong cultural and economic linkages were sustainable and allowed for domestic and foreign companies to adapt quickly to new policy environments and institutional infrastructures. The newly independent Slovakia had real GDP growth of 6% in 1994 and growth continued at an average rate of approximately 5.5% through 2004, except for slower growth in 1999 and 2000 due to the moderate global recession during those years. With the accession to the European Union, economic growth accelerated in the period 2005 through 2008 with an average annual growth rate of 7.5%. The global recession and the EU financial crisis severely impacted Slovakia with a deep but short lived recession in 2009. From 2010 through 2013, real GDP grew at an annual rate of about 2.8%. Throughout the period of this study, annual economic growth in Slovakia outperformed Hungary with the exception of 1999 and 2000 (World Bank Annual Report 2014 and National Bank of Slovakia estimates).

Slovakia moved quickly to liberalize its economy and business regulations after independence but comprehensive structural and policy reforms during 2000–2005 re-
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ally accelerated growth compared to other Central European regional economies. The corporate tax rate fell from 40% in 1999 to 19% in 2004, foreign investment regulations were liberalized, labor laws were loosened and restrictions on starting new business and acquisitions were mostly eliminated. The World Bank named Slovakia as the world’s top reformer in liberalizing the investment climate in its publication, “Doing Business in 2005”. In addition, the country’s favorable low cost and wage environment, its geographic central location and educated labor force attracted significant foreign and domestic investment. Full membership in the European Union and the adoption of the euro in 2009 added greater stimulus to the economy and investment.

However, more recently the Business Alliance of Slovakia has reported a negative trend in the general business environment because of increasing bureaucratic procedures and a non-transparent and sometimes ineffective legal system (American Chamber of Commerce in the Slovak Republic, 2013).

FDI inflows from 1993 through 2013 were positive each year, with the exception of the recessionary year of 2009. From 1993 through 1999, annual FDI inflows were approximately 300 million dollars a year. However, with full economic liberalization and economic growth and membership in the European Union, annual FDI inflows increased quickly and averaged almost 3 billion dollars from 2000 through 2008, a tenfold increase (World Bank UNCTAD, 2014, and IMF, International Financial Statistics, 2013). As with other countries in the region, the global financial crisis and EU slowdown led to negative FDI flows in 2009 but FDI inflows recovered quickly and reached 2.8 billion dollars in 2012. Although in aggregate nominal terms FDI inflows in Hungary have been greater in the last decade, the flow of FDI per capita has been greater in Slovakia which currently has a population of 5.4 million compared to 9.8 million in Hungary.

In discussing the relative economic and FDI performance of Hungary and Slovakia, it is also important to note their rankings in global indices of competitiveness and ease of doing business. In terms of growth in labor productivity and low labor costs, both the OECD and Eurostat rank Slovakia as the leader in 2012 in the Eurozone in the growth index of labor productivity and also the country with the lowest labor cost per hour in the region (OECD, 2013, Eurostat, 2013). In the IMD rankings of world competitiveness, both countries have ranked in the low thirties from 2004, EU accession, to 2008 of the 59 countries analyzed, with Slovakia ranked slightly higher. However, both countries have dropped in the IMD rankings the last few years as a result of both the global financial crisis and the European Union recession from 2009 until the present (IMD World Competitiveness Report, 2012). In the World Economic Forum global competitiveness index, Hungary was ranked slightly higher than Slovakia in 2012, 60th compared to 71st of the 145 countries analyzed (World Economic Forum Global Competitiveness Report 2012–2013). Both countries saw a decline in their rankings for reasons discussed earlier in the IMD report but also because of a more uncertain and re4strictive policy environment. In the World Bank ease of doing business
rankings, Slovakia was ranked significantly higher than Hungary in 2014, 37th compared to 54th for Hungary of the 190 countries ranked (World Bank Doing Business in 2014). Lastly, in the Heritage Foundation’s Index of Economic Freedom, Slovakia was ranked 35th of 180 countries analyzed while Hungary was ranked 51st (Heritage Foundation Index of Economic Freedom, 2011).

**Literature review**

In the extensive literature on FDI, much of the recent research has applied Dunning’s (1980) ownership, location and internalization approach (OLI) and examined relative factor endowments (Helpman, 1984), openness to trade (Hejazi and Safarian 1999), comparative advantage and institutional factors (Bush et al., 2003). Other studies of the determinants of FDI have focused on economic conditions, host country policies and MNE strategies and have been well documented (Lall, 1997, UNCTAD, 2009, 2012). Specific FDI determinants in developed economies tend to focus on market size and growth, infrastructure, risk reducing policies, tax rates stability and strength of the currency, and tax incentives. In addition, studies of FDI determinants in emerging markets often include measures of labor costs and labor skills, trade openness and market size factors (Blonigen, 2005).

There have been a number of papers focusing on FDI in the European Union. Barrell and Pain (1996 and 1997) developed a theoretical model to analyze US FDI in Europe and concluded that market size and factor costs are important determinants as well as labor market efficiency and stability. Beer and Cory (1996), in their empirical study of US FDI in the European Union, add to traditional factors of market size, labor costs, and trade flows, proxy independent variables for infrastructure and taxes. The authors use gross fixed capital formation and government tax revenues as a percentage of GDP as their proxies. For their sample of 11 EU counties, market size and wage differentials have a significant impact on overall US FDI but neither of their proxies are validated for specific host countries. Bevan and Estrin (2004) established that country risk, labor costs, host market size, EU accession and gravity factors were significant determinants in attracting overall FDI in Europe. Wolf (2006) examined the effect of taxes on FDI inflows for the enlarged EU and concluded that corporate tax rates controlling for country characteristics were insignificant for total inward FDI as were wage factors. Foad (2007) analyzed data on US FDI in seventeen European countries from 1983 to 2004 and validates export market access and Euro membership as factors having an impact on US FDI during the period. The significance of market size, corporate tax rates and labor cost were confirmed by Torrisi et al (2009a, 2011) who also found privatization to be important in attracting foreign investment into Poland and that EU enlargement and Euro membership were significant positive factors in FDI inflows into Belgium but may have had a negative impact on the United Kingdom (Torrisi, 2014).
Two recent papers have great relevance to this study. In a publication by Sass and Kalotay, the authors analyze FDI inflows to Hungary and the policy context. Although their paper is descriptive rather than empirical, their conclusions confirm much of the empirical academic studies of the determinants of FDI and the impact of the economic environment both internal and external on FDI. The importance of the policy environment and the pace of economic liberalization for foreign investment in transitioning economies is strongly emphasized in their study. Their conclusion that Hungary’s investment potential is high but risks are growing in comparison with other EU members in Central Europe because of political, bureaucratic and regulatory issues provides a strong warning to Slovakia (Sass and Kalotay, Inward FDI in Hungary, Vale Center 2012).

In a recent article by Arnold Schuh (Journal of East –West Business, 2012), the author examines the growth strategies of foreign multinationals in Central and Eastern Europe (CEE). In the decades of transition to a market based economy and broad economic liberalization since 1990, he argues that FDI inflows and policy reforms stimulated a quite successful economic recovery and performance, closing the gap with other EU economies. However, the paper asserts that the global financial crisis of 2008–2009 and the ongoing economic slowdown in the European Union severely affected the CEE economies as export markets suffered, capital inflows and domestic investment diminished and national budget deficits and debt increased. National statistics on Hungary and Slovakia as mentioned earlier in this paper do show major economic and FDI decline in 2009 but a fairly rapid recovery beginning in 2010. The author concludes, however, that the original business model and strategy that led to increased FDI by multinational enterprises in the CEE in the period 2000 to 2007 is still essentially valid despite the global and EU financial/economic crisis. Schuh argues, “Neither the CEE huge market potential nor its favorable cost and resource situation have disappeared…..from the perspective of 2012, the crisis can be seen as a mere interruption of the catching-up process than a genuine systemic crisis” (Schuh, 2012). Multinational enterprise will maintain their entry strategies and commitment to the CEE but will pay more attention to country business risk and the changing policy/political environment is the author’s expectation. In this paper, the analysis of the FDI experience of Hungary and Slovakia in the last twenty years strongly supports his conclusion.

Methodology and model specification

The dependent variable in the FDI models estimated for Hungary and Slovakia is annual FDI inflows as reported by UNCTAD (World Investment Report, selected annual editions). Thus, the measure includes all reinvested earnings as well as new capital inflow and provides a consistent time series of annual FDI. Annual GDP is measured in current dollars and/ or real dollars for the time period analyzed, as specified
by UNCTAD and World Bank sources and adjusted for exchange rate variation. Data for additional independent variables examined in our FDI models are primarily from these international sources as well as OECD data banks. For each variable, there exists a consistent time series for the period 1993–2012 as provided by these organizations and agencies.

Recent analysis of FDI determinants in host economies emphasize a variety of macroeconomic indicators. To examine the validity and relevance of these basic models of FDI reported in studies of larger OECD countries, some macro-economic variables that are available in consistent time series from international and/or governmental sources are included in the regression models estimated in this paper, i.e. market size, market growth, trade openness, statutory tax rates and wage indicies. The importance of these economic factors on FDI inflows in these two smaller transitioning economies during a period of economic liberalization and political/institutional reform, rapid growth in global FDI, full integration into the European Union and continued trade and investment liberalization should be great. However, it was also a period of economic uncertainty, minor recessions followed by a regional and global economic/financial crisis, and increased competition for FDI within the EU and globally.

Of course, less quantifiable and non-economic factors may also have had significant impact on FDI inflows into these countries, such as political stability, institutional efficiency, cultural similarity, and infrastructure proxies but measurement of these qualitative variables is difficult and does not generate a consistent and comparative time series for the period of this study. It is reasonable to assume these non-economic variables would have had some influence on FDI in Hungary and Slovakia during the period of transition to a market economy and economic liberalization. However, in many existing studies of FDI determinants the statistical results are not consistent or robust for these qualitative variables, given data limitations and measurement problems over the specified period. This paper does attempt to explore the impact of two significant events during the period of this study for both these countries, through the use of dummy variables, that may have influenced the political and economic environment for FDI. Obviously, the enlargement of the European Union in 2004, with both Hungary and Slovakia entering along with many of their regional neighbors/competitors, and the entry into the Eurozone with the adoption of the euro by Slovakia and not by Hungary in 2009 might be expected to influence the strategy of foreign investors in their allocation of FDI within Europe and the magnitude of FDI inflows. In the regression models estimated, a number of different specifications for the macroeconomic determinants of FDI inflows were analyzed and dummy variables were included to determine whether there exists a significant once and for all impact of EU accession and adoption of the euro on FDI in these two countries. The results reported in this paper are only for those regression estimates that generated robust regression statistics and identified consistently significant coefficients for many of the independent variables examined.
Market size is measured by annual Gross Domestic Product in dollars and is expected, as confirmed in many empirical studies, to be a significant and positive determinant of FDI. In various estimates, both nominal and/or real GDP in constant 2010 dollars measures were included (World Bank, 2009, 2015). However, export-oriented FDI in smaller economies, domestic market size may be irrelevant. Proximity and more importantly access to regional markets may be driving FDI inflows into smaller economies such as Hungary and Slovakia. Market growth as measured by the annual growth rate of real GDP is also examined, as foreign investors who are market seeking may be more motivated by economic growth experience and potential rather than current economic activity in many emerging economies. If much FDI is efficiency seeking and export-oriented, the attractiveness of a host country to foreign investors should also be strongly influenced by production and labor costs, especially in comparison to regional competitors. Thus, a wage rate index from the National Statistical Offices of Hungary and Slovakia are included in the regressions estimated. During a period of rising wages in the larger EU economies, as was the case in the period of this study, the smaller regional economies with lower labor costs became more competitive in the market for FDI. The theoretical expectation would be that resulting lower labor costs of production would increase FDI inflows into smaller economies. In the empirical literature, there is evidence of a significant negative relationship between measures of labor cost and FDI inflows. However, if FDI inflows are also attracted by domestic demand conditions, market size and cultural and institutional proximity, wage costs may not be a significant determinant of FDI.

Some previous studies of FDI argue that trade “openness” of the host economy may be positively associated with FDI inflows. If much of FDI is export oriented and requires the import of complementary intermediate and capital goods, trade volume increases overall and as a percentage of economic activity. Also, trade openness can be a proxy for successful economic liberalization and favorable trade policies. Thus, a trade openness variable measured as the annual total of exports plus imports is also included in some of our models estimated, with an expected positive and significant coefficient. As an alternative trade variable influencing FDI, annual exports plus imports as a percentage of GDP was also examined. As in earlier EU studies (Torrisi, 2012, 2014), this paper examines the impact of the introduction of the Euro for Slovakia and of EU enlargement for both countries as represented by dummy variables, the Euro dummy equal to zero from 1993 to 2008 and to one for 2009 to 2012 and an Enlargement dummy equal to 0 from 1993 to 2003 and to one from 2004 to 2012. Academic research and indeed the experience of smaller economies joining the EU suggests that the benefits of accession and membership to regional free trade blocs include increased FDI inflow as access to a growing regional market enhances a country’s attractiveness to investors. The expectation is of a positive and significant relationship to FDI in Hungary and Slovakia. Empirical studies of FDI in the literature sometimes attempt to include a variety of risk factors or proxies, both economic and financial. Given the subjective nature of
these measures, the inconclusiveness of the results in many of the previous studies, the absence of political and economic risk measures for the time period of this paper and the lack of validation of specific risk variables in past research on FDI, our models estimated do not include specific risk variables.

Although previous studies (Wollf, 2006) suggest that corporate tax rates are insignificant factors for overall FDI across the EU, this paper examines their impact of FDI in Hungary and Slovakia specifically. Much of the academic research on efficiency-oriented and export-oriented FDI in emerging or transitioning smaller economies provide some evidence that corporate statutory tax rates do influence FDI in the regional allocation of inflows. Both countries since their economic liberalization and membership in the EU have significantly reduced their corporate tax rates. Hungary in 1993 had a rate of 40% on corporate profits but by 2004, the year of accession to the EU, the tax rate had fallen to 16%, although the global financial crisis and the resulting EU recession and increased public debt in Hungary led to an increase to 19–20% by 2008 (IMF, 2004, 2012).

The experience in Slovakia and the changes in statutory corporate tax rates was quite similar. In 1993, the year of independence and separation from the Czech Republic, the corporate tax rate was 45% but by 2004 and EU membership, the tax rate had been reduced to 19% (IMF). The new government in Slovakia in 2012 faced with budget deficits and concerns about meeting Eurozone deficit and debt requirements raised the statutory corporate tax rate to 22%. To increase and maintain competitiveness it is evident that both countries adjusted their tax rates similarly to be more attractive to foreign investors regionally, in the EU and as competitors in Central Europe. Other factors which might influence FDI such as existing FDI stock, and infrastructure proxies are not included in this study either due to severe time series data limitations and/or non-quantifiable variables. It is important to note that during the period of this study economic liberalization domestically and economic openness to Western Europe and the world were the dominant factors in the policy environment in both countries since 1993. In future research, it may be possible to measure some of these factors by more extensive data search and the design of comparative regional variables to capture the potential impact of the policy environment on the allocation of FDI inflows in the European Union.

In conclusion, traditional classical models of FDI determinants have been adapted to the unique environment and issues which have possibly impacted FDI inflows to Hungary and Slovakia. During this research, the author specified and estimated a number of FDI models for Hungary and Slovakia, including a variety of macroeconomic variables, that were not constrained by time series data limitations. Using OLS multiple regression and stepwise regression methodology, this paper reports only those models and results that were robust and consistent, produced acceptable regression test statistics, and lead to some interesting and important conclusions regarding FDI in smaller transitioning economies.
Empirical results

As mentioned earlier, a large number of models of FDI in Hungary and Slovakia were specified and examined. Two of the most interesting and robust are reported following. Lagging the independent variables did not improve the overall regression results or change the significance of some determinants. As a result, this paper defines the dependent variable as annual FDI in each country from 1993 to 2012, using UNCTAD and World Bank data. Consistent time series data on current and real GDP is obtained from the same international sources. However, the wage index and trade openness (measured as exports plus imports) variables were determined from a variety of sources including the national statistical offices and central banks of Hungary and Slovakia. At all times, utilizing the most consistent set of time series data was paramount. Data on statutory corporate tax rates were obtained from World bank and IMF reports. As previously noted in the literature review, there may be a number of qualitative variables that influence FDI inflows such as language and cultural proximity, institutional and risk factors, infrastructure measures, legal and economic policy environmental proxies etc. However, given data limitations and lack of robust results in previous empirical research on FDI in larger advanced economies, analyzing the possible impact of these determinants on FDI in Hungary and Slovakia is beyond the scope of this paper. The basic model specified and estimated in this model for the period 1993–2012 is reported in table 1 following:

Basic Model: $\text{FDI} = f(\text{Current GDP}, \text{Growth rate of Real GDP}, \text{Trade Openness}, \text{Wage Rate Index}, \text{Corporate Tax Rate}, \text{EU Enlargement dummy})$

The regression results for the basic model of FDI in Hungary confirm that trade openness was a very significant and positive FDI determinant and the wage index, as expected was significant and negatively related to FDI. GDP and GDP growth, the corporate tax rate and the dummy variable representing enlargement of the EU in 2004 were not statistically significant determinants of FDI, although the coefficients had the expected signs, with the exception of the EU dummy, in all variants of the basic model estimated.

Table 1. The basic model – Hungary

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficients</th>
<th>T stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current GDP</td>
<td>.63132</td>
<td>1.114</td>
<td>.282</td>
</tr>
<tr>
<td>Real GDP Growth</td>
<td>.751.56</td>
<td>.7553</td>
<td>.461</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>.94737</td>
<td>2.636**</td>
<td>.019</td>
</tr>
<tr>
<td>Corporate Tax Rate</td>
<td>-821.01</td>
<td>-1.673</td>
<td>.190</td>
</tr>
<tr>
<td>EU Enlargement Dummy</td>
<td>-28385</td>
<td>-1.564</td>
<td>.139</td>
</tr>
<tr>
<td>Wage Index</td>
<td>-1679.4</td>
<td>-5.024**</td>
<td>.002</td>
</tr>
</tbody>
</table>

$R^2 = .746$ ** Significant at 5%
For this model, the R square is acceptable suggesting good overall explanatory power and there is no evidence of autocorrelation in other regression test statistics. The dummy variable for the enlargement of the EU in 2004 did not have a significant impact in any variants estimated for FDI in Hungary. It may be that there was not an immediate impact on FDI inflows for Hungary from EU membership but a more gradual effect as the Hungarian economy transitioned to full integration and regional free trade. Also with export oriented and efficiency seeking FDI, the trade openness variable in the model may be more important to foreign investors and captures some of the impact of expanded intra-EU trade since 2004.

The second model in Table 2 excludes the domestic GDP growth rate which was never significant and did not improve the regression statistics. As shown in Table 2, the R^2 for this model is .737, suggesting this model has significant explanatory value. The coefficients for trade openness and the wage index remain significant and correctly signed and the corporate tax rate variable becomes significant and with the expected negative sign. This suggests that FDI inflows into Hungary were clearly efficiency seeking from both a cost and tax liability perspective.

Model 2: FDI = f(Current GDP, Trade Openness, WAGE Index, Corporate Tax rate, EU Enlargement Dummy)

Table 2. Fdi model without GDP growth rate, Hungary

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficients</th>
<th>t</th>
<th>Significance</th>
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</thead>
<tbody>
<tr>
<td>Current GDP</td>
<td>.61894</td>
<td>1.107</td>
<td>.284</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>.94217</td>
<td>2.658**</td>
<td>.0171</td>
</tr>
<tr>
<td>Wage Index</td>
<td>-1664.6</td>
<td>-5.06**</td>
<td>.0001</td>
</tr>
<tr>
<td>Corporate Tax Rate</td>
<td>-1072.8</td>
<td>-2.19**</td>
<td>.043</td>
</tr>
<tr>
<td>EU Enlargement Dummy</td>
<td>-29694</td>
<td>-1.666</td>
<td>.115</td>
</tr>
</tbody>
</table>

R^2  .737  ** Significant at 5%

For this model, the results are robust and also confirm that domestic market size and the EU dummy are not verified as significant determinants of FDI as indicated for the basic model. In a subsequent estimate, the GDP and EU dummy variables were excluded. The R^2 decreased slightly to .695 but the coefficients of Trade Openness, the Wage Index, and the Corporate Tax Rate remained highly significant and correctly signed.

Both models were estimated for FDI into Slovakia. Although smaller in economic and demographic size, Slovakia is a strong competitor of Hungary for FDI in Central Europe, in terms of location, costs, cultural and business environment, infrastructure and membership in the EU in 2004. However, one point of distinction is that Slovakia joined the Eurozone in 2009 while Hungary retained the florin as its currency. The pe-
period of this study prevents useful empirical analysis of any Euro impact on FDI inflows but this will be examined in future research.

**Table 3. The basic model - Slovakia**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficients</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current GDP</td>
<td>-.18581</td>
<td>-1.45</td>
<td>.632</td>
</tr>
<tr>
<td>Real GDP Growth</td>
<td>16.70</td>
<td>.236</td>
<td>.817</td>
</tr>
<tr>
<td>Wage Index</td>
<td>-17.52</td>
<td>-.419</td>
<td>.682</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>.0978</td>
<td>2.46**</td>
<td>.032</td>
</tr>
<tr>
<td>Corporate Tax Rate</td>
<td>-151.7</td>
<td>-1.85*</td>
<td>.090</td>
</tr>
<tr>
<td>EU Enlargement Dummy</td>
<td>628.1</td>
<td>.554</td>
<td>.590</td>
</tr>
</tbody>
</table>

**R2 .75 **

Table 3 presents the results for Slovakia of the FDI Basic Model estimated. Trade Openness has a significant positive impact on FDI inflows for Slovakia which was the case for Hungary as well. This confirms the likelihood that smaller economies which aggressively pursue economic and trade liberalization are likely to attract export oriented and efficiency seeking FDI. Furthermore, for Slovakia, the corporate tax rate variable has a significant and negative coefficient suggesting that the decline over the period of the statutory corporate tax rate had a positive impact on FDI inflows. During most of this period, Slovakia had lowered its corporate tax rate faster and more aggressively than Hungary and other regional competitors. The coefficients of the remaining FDI determinants in the basic model are not significant, although with the expected signs for real GDP growth, the wage index, and EU Enlargement, except for current GDP which has a negative but insignificant coefficient. As was validated by the regression analysis for Hungary, there is no evidence that domestic market size as measured by GDP impacts the FDI decisions of foreign investors in small economies.

A number of specifications for the basic model, excluding current GDP and/or real GDP growth, including real GDP, using a different wage index based on per hour manufacturing labor cost and removing the Enlargement dummy were also estimated for Slovakia. These results are not reported in this paper because in every estimate the regression coefficients for Trade Openness and the Corporate Tax Rate remained significant and correctly signed. In each variant, the regression statistics were robust and with an R Square of .69 or higher.

**Conclusion and future research**

This paper has analyzed the experience of two smaller transitioning economies with geographic and some cultural proximity to larger economically advanced countries, a stable political environment, liberal and open FDI policies, trade access to the E
U market, and favorable and competitive tax rates and labor costs. Of course, for Hungary and Slovakia, liberal business and economic policies as well as an educated, productive labor force and reasonably reliable transportation, communication and energy infrastructure may have also attracted much FDI from European and global investors, i.e. China and the U.S. A recent publication by the American Chamber of Commerce in the Slovak Republic (2013) reported Slovak labor to be the most productive in the Eurozone with the lowest labor costs as provided by Eurostat. The Chamber also cited Hungary as having the second lowest labor cost, slightly higher than Slovakia, of 20 EU countries ranked. The statistical regression results are consistent, robust and significant for both countries. Trade openness, lower wages and corporate tax rates have a significant impact on FDI inflows. The results validate that FDI in these smaller economies is export oriented and efficiency driven and that domestic market size and market growth may not be a determinant of FDI inflows.

In 2004, both countries became full members of the EU along with other regional competitors, like the Czech Republic and Poland, the often clustered Visegrad countries. This accession to the EU might be expected to have a significant positive impact on export oriented FDI. The EU enlargement dummy however did not have a significant impact on FDI. It may be that trade liberalization in both countries was a strong and continuing process from 1993 on and that overall trade openness during the period captured some of the impact of access to the EU market. Future research may examine any impact of EU and/or Euro membership through alternative slope shifting dummy variables rather than a once and for all EU dummy. For Slovakia, the decision to join the Eurozone in 2009 was partially driven by both economic and political factors as a smaller EU member. For Hungary, it appears the decision was more purely political and nationalistic. Recent FDI data suggests that Slovakia has benefitted from adopting the Euro and from the tilt toward more business regulation by the current Hungarian government.

Of course, recent economic instability in the Eurozone, post global financial crisis economic uncertainty within the EU and globally, current tension with Russia and the proximity of the conflict in the Ukraine, and euro volatility may have a possible negative impact on FDI. However, there is not enough statistical evidence to confirm this outcome at this time. The paper by Schuh, (2012) discussed earlier makes the case that the recent economic and political instability in the EU since 2008 is more of a temporary interruption in the growth of FDI inflows into Central Europe. He concludes the strategies and objectives for foreign investors in the region will not fundamentally change. However, it is likely that there will be a more realistic and pragmatic analysis of economic competitiveness and overall business climate in potential host countries. In this case, it is possible that Slovakia and Hungary with relative economic and political stability may benefit. The World Investment Report 2014 (UNCTAD) concludes that cautious optimism has returned to the global FDI environment and projections are of a recovery in FDI flows into the EU, although below levels prior to the 2008 financial
FDI in the Smaller Economies of The European Union

FDI in the Smaller Economies of The European Union crisis, with the exceptions of Greece and Portugal. Recent elections in Slovakia continue the commitment to economic liberalization and EU integration. However, the political environment is less clear for Hungary as foreign investors express concern over recent government economic policies.

Areas for future research on FDI in smaller EU economies should consider more sectoral and industry analysis as economic transformation accelerates in Hungary, Slovakia, the Czech Republic and the Baltics. Limitations on data availability will be the research challenge. Also, extending the data set to better examine the FDI impacts of the global financial crisis, the EU economic slowdown and the recent fiscal crisis will be necessary as some foreign investors hesitate given such uncertainty. Adding a dummy variable to assess Euro membership as a determinant of FDI and a reliable measure of productivity, if available, could enhance the empirical results. Also, proxies for infrastructure development and alternative indices of national competitiveness will be developed and analyzed in future specifications of these models of FDI determinants.

Lastly, analyzing the market share of FDI in the European Union of Hungary and Slovakia through the last 20 years may be useful in understanding the competitiveness of these smaller economies in the market for FDI. Specifying and estimating FDI models for the relative market share of FDI inflows in these countries as a percentage of total FDI inflows in the EU from external investors will extend this research. For smaller member countries on the periphery geographically, institutionally, and culturally, such as Hungary and Slovakia within the EU, in other regional blocs such as ASEAN, the Association of Southeast Nations, this research should be useful and relevant. Analyzing relative share shares of FDI may identify specific determinants that impact competitive and comparative advantage within regional trade blocs and host country attractiveness, such as relative currency stability, relative labor costs and productivity gains, transport and infrastructure variables and relative tax rates. However, the obstacles and challenges to quantify and obtain reliable and consistent time series data on these new relative variables for the EU and member countries will be significant.

For smaller host countries in regionally integrated FDI markets and their policy makers and for foreign investors making location and allocation decisions, gaining a greater insight into FDI determinants in a more rapidly integrating but uncertain EU economic environment may be increasingly important. With greatly different member economies by size and structure, divergent country commitments to the integration process, and changing national government policies and business climates, the challenge for productive and reliable empirical analysis of FDI is great but the potential value to policy makers and multinational enterprises may be equally high. For smaller countries with larger and more powerful neighbors and competitors in the regional market for FDI, the need to increase FDI inflows to maintain economic growth and to accelerate economic liberalization and transition is high as are the economic and political risks of not doing so. As more and more capital flows to emerging economies and smaller low cost open economies such as Hungary and Slovakia, this research may pro-
vide useful and relevant information on the allocation of FDI in a changing and uncertain global economic environment.

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The Case Study Method as a System Enhancing Industrial and Professional Training of Students

The article investigates the case study method being the effective tool in industrial and professional training of students. The role of case study method as educational technology is increasing all over the world including Russia. The further implementation of case study method enhances the training of students interested in the leading sectors of Russian economy. This applies in particular to energy sector. Significance of development engineering qualifications in Russia causes the engineering case study method to be increasingly important. The article discusses typical structure and features of the engineering case.

Key words: case study method, industrial training of students, professional training of students

A case study is one of the most modern educational technologies widely spread in the United States and Europe, where 90% of learning in master’s programs and other training programs based on its use. Case study involves an individual performance or a teamwork in finding the solution for specific problems or business problems resembled to the real life. Theoretical knowledge, professional experience, technical and economic calculations as well as the logic could be utilized to reach the result. Experts from the technical and HR services of leading industrial companies, scientific and educational centers, industry professionals and case specialists evaluate relevant solutions.

Case study intensively used in the assessment of employee’s practical skills and competencies already involved in the working process or in the hiring new candidates
to verify the requirements of how well they cope with the job responsibilities. Certain competencies are beyond the common procedure of the interview, testing or other methods. For instance, such competencies include the ability to foresee the alternative way, making the decisions, taking the responsibility, working for a team, etc. To reveal these competencies there is described the “real problem” of the company, in other words, there is a case meeting the business needs.

As opposed to the traditional training system of knowledge and competencies, the case study method is more interactive. In the traditional training system one-way channel in transferring knowledge takes precedence as the researcher / initiator gives information to learners for replication.

Usually the typical research question within a case study concerns on how things are or how they behave. It is a point for a critical discussion in terms of objectivity the study. In comparison with the traditional research approaches such as a survey, an experiment or a historical analysis, the empirical evidence in case study is not so explicit. This implies a diminishing in result’s representativeness. Nevertheless, the development of case study as one of the most widespread approach is observed. Possibly, the reason in case study aiming to answer sophisticated questions. And only the specifics of key question related to the research objective reveals the case study relevance.

It should be noted that case study may be given as a whole mix of different approaches from empirical analysis to the design science research. Instead of each method in particular, when conducting a case study the researcher / initiator to look thorough the entire environment of the situation considering the cooperation between the participants. Such a “penetration” enables case study to shed some light on underlying factors shaping the outcome. Essentially it depends on the research willingness to “go further” on analyzing the circumstances.

Meanwhile, the distinctive features of the case method are:

• used in the disciplines, tasks, activities, processes, where there is no clear correct answer to the question as the several answers compete for being observed;
• instead of transferring main focus on the knowledge, the case study implies creative cooperation between the task initiator and the employee, hence the fundamental difference of this method from the traditional methods;
• the competencies/ skills are determined as possible result as well as knowledge;
• the development a model of a particular situation requiring for knowledge and practical skills is defined as the core principle in case formation.

The basic prerequisite for content in the successful case studies – the existence of a problem or even the range of problems without unambiguous solution. The research question undertaken provides the case study can be designed in such manner to reveal several problems at the same time.

Concerning the difference of case approach with the method for traditional sciences, it should be taken taking into consideration the scientific purpose of the study. Aiming to seek the truth and to advance the knowledge is more appropriate for describing
the objective in traditional sciences. While the search of the best solution in the existing situation fits better for the issues in business. The focus of deigning the way in order to resolve the case distinguishes the choice of methods in such areas like management or engineering. That causes the case study approach to be claimed by the training of young professionals in these spheres.

The design of case approach implies a reducing the gap between theory and practice of the study. Figure 1. presents a common type of designing the case study. Judging the scheme, the solutions for the problem investigated are rapidly implemented due to the relevance of the study results. Such relevance caused by combining the topical base of the study with application of the appropriate theory findings. Further implementation of case study results offers the prospect of increasing interest from the business side to a scientific research.

Figure 1. The case study design

Source: prepared by the authors.
In Russia the use of case studies is not so spread as in Europe, where it became actively utilized for assessment and hiring the personnel. Russia gains this experience not so long ago concerning the use of case studies for assessment and trainings. Training the engineering personnel is one of the most urgent issue for labour market in Russia. The evidence for it is the Development program of the coal industry until 2030, approved by the RF Government from June 21, 2014, № 1099-p, includes the subprogram “Development of industrial relations, corporate social responsibility of the coal companies and the improvement of the professional training system for the coal industry”. The objectives of the subprogram focus on the development and consistent implementation of measures to move towards more sophisticated labor relations in the coal industry, providing a steady improvement in the quality of life for employees and for public in coal mining areas in general. The subprogram aims at the development of advanced training system for employed in the coal industry enhancing training of students from the mining majors or the coal company employees based on the “case method” for advance in industrial, technological, organizational, managerial, research, design and general cultural competencies.

As usual, the case study implies the analysis of business situation considering the rolling out of new product, new marketing structure or cost reduction in the related economic situation. However, such case studies used in business schools do not enable to reveal the engineering skills.

In this way, Russia has more than 3 years establishing the use of the “Engineering Case”. The specifics of this case consists precisely in addressing the technological challenges associated with the new equipment implementation, changes in processing techniques, etc. Engineering Cases are designed in such a way that each component of the case study is aimed at obtaining new knowledge and the development of certain competencies in students. In particular, the analytical section of the case describes the current trends on the major markets on different types of produced or processed raw materials, including retrospective and forecast demand for the final product. For instance, the section devoted to the description of geological conditions includes information about the features and characteristics of the mineral and the conditions of its occurrence. The technological part describes the production methods, taking into account its specific features in the enterprise. The technical part is devoted to the description of the technical equipment involved in the production. And finally, the economic part contains information about the task structure for the provision of basic production processes, the income from sales of products, factors and risks affecting the sustainable competitive position in the industry.

Another way in knowledge assessment and in formation of sustainable industrial motivation is case contest within the largest forums or other events in energy or gas industry. First of all, the cases for such events imitate a particular situation in the industry, concern the most significant projects, based on industrial or interdisciplinary integration, require the participants to show the ability to make strategic decisions, included
the skill of long-term planning. *Industrial section* of the case content describes the most meaningful processes and technology, the markets and framework for industrial cooperation. *Regional section* presents the projects with the potential for industrial development in the region, discussing the delivery conditions of sources and of the final product, economic, law and social factors. *Organizational and economic section* gives a view on industrial players established in the region, as well as on innovative projects for gaining the competitive advantage; on integrational mechanisms in project implementation; on economic indicators to attest the sustainable development.

Speaking on the expected result from case study, it is noteworthy to consider the perspective for the situation observer as well as to predict which kind of measures should be taken. So the further steps for case study researcher concerns the activities in order to prevent the appearance of situation investigated. Coordination of retrospective and perspective view on problem integrates the study method in a design science research.

**Conclusion**

Thus, the young professionals from industrial companies, whose current knowledge level and competences are identified by the means of engineering and business cases, might get a clear view on the most important tasks in industry, while the competent expert committee receives a basis for personnel decisions both horizontal and vertical type. Case method becomes the key technology system strengthens the training of students in engineering and economic profile, including vocational guidance and practical training.

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The Innovative Vector of Pacific Region: 
the Experience for Eastern Europe

Countries of the Asia-Pacific rank the leading positions in innovative ratings and show high growth rates of innovations. Innovative models of developed or emerging countries have a number of unique features. The variety of cultures in Asia-Pacific Region influences on the innovation potential of the population. The philosophy of Confucianism, which is the part of behavior of people in any part of Asia, plays the special role here.

Variety of cultures in Asia-Pacific (AP) countries produces significant effect of the population's potential for innovation. A special part here belongs to Confucianism that permeates people's behavioral model in any part of Asia. It features collectivism and mutual assistance in interpersonal relations, aspiration for knowledge and competitiveness in acquiring it, preservation of tough behavioral pattern based on sense of duty, respect for seniors, devotedness and compliance with social, family and group. Thus, such countries, which are the most active in innovation in the region and in the world, as Japan, Taiwan, South Korea and Singapore attribute themselves to the followers of “Confucian capitalism”. Despite the variations in methodology used to calculate a country’s innovative potential ("Innovation Index" by Bloomberg – 50 countries, 7 sub-indices; “Global Innovation Index” (GII) by World Intellectual Property Organisation, Cornell University and INSEAD business school – 141 countries, 79 indicators), AP countries occupy leading ranks anyway and show high rates of growth. Innovative models, developing same as the already established, of the countries under study possess a number of specific features. [4]

As per the ranking by Bloomberg, China’s 21st position is a proof to the fact that the country retains the status of an emerging innovative state. [5] Alongside with a common truth that any technology used there is primarily an adopted one. Today,
China has several nation- and province-wide programs aiming to support the scientific research and commercialization of R&D. Around two per cent of the country’s GDP are allocated to this end by the government. Still, the place occupied by China in the ranking by Bloomberg is yet 21st, since it is an emerging economy and technology used there have been adopted from elsewhere rather than created in the country itself. [4] China is actively importing technology and based on that, builds up its own R&D’s. Today, the country’s policy in this field is focused on boosting original innovation. [2] This “delayed” industrialization gives China an advantage such as an ability for rapid and much more cost-effective elimination of backwardness compared to developed countries. [6]

According to the Global Innovation Index, India preserves the leading position among the countries of Central and South Asia. The said report features India as growing its innovations tempo and fostering the spirit of entrepreneurship that also adds up to the high-tech component in its economy. Besides, India is among the leaders in the quality of innovation (quality of scientific publications, patents, ranks of its universities). An attribute that distinguishes the innovation system of India is an all-round support for small and medium businesses by government that includes financial and technological foundations granted to companies, growing their unions in form of clusters while simultaneously strengthening bonds with big enterprises, assistance in staff training, guarantees of intellectual property rights, providing access to industrial infrastructure.

The present-day Japan is a synonym of high technology. It is actively implementing innovation where big part is played by difference that exists between innovation in Japan and in the western countries. As per the ranking of Global Innovation Index of 2015, the country is in the top-three in quality of innovation. In 2013, the European Patent Office (EPO) put 265 patent applications on record.

Basically, around 80% of R&D costs are borne by industrial sector. The main focus of scientific research is on application studies and development where Japan is an indisputable leader. Interestingly enough, Japan’s R&D, unlike many countries, and Russia is one of them, are of non-military, civil nature.

Yet after one generation South Korean economy turned from one of the poorest into one of the richest in the world. In the basis of such transformation is innovation. If compared to other developed states, the county is investing a far greater share of its GDP in R&D. One of the main advantages enjoyed by South Korea is a high rate of implementation among new projects. While new ideas of the Silicon valley are transformed into startups and seeing them through is often an issue, in South Korea innovation is created within its companies.

The Bloomberg’s Global Innovation Index of 2016 has recognized the South Korea as a country with the most innovative economy in the world. The main bet of the South Korean companies is on innovation while they also are facing ever stronger competition in the global markets. [4]
According to the Global innovation ranking, Malaysia has achieved the figures similar to those of 25 leading high-income countries, including in such areas as human capital development and funding of R&D.

In recent decades, in Malaysia greater attention is being given towards the economic role of innovation. Because the ability to innovate will play a more prominent role in driving future economic growth, the national government of Malaysia has accelerated policy efforts aimed at strengthening their national innovation systems.

A model of national renovation called “Vision-2020” has been designed to transform Malaysia into an economy where priority is given to innovation and that pays much attention to education and science promoting research intensity in every industrial sector ranging from bio- and information technology to agriculture. One of the elements of this model is the Malaysian Multimedia Super Corridor.

Today, Singapore is ranked 2nd in the global index of competitive ability in investor and intellectual property rights protection, development of infrastructure, financial market, efficiency of state spending. As per the Global Innovation Index, Singapore holds the 1st rank in Asia and the 7th in the world. [5]

Aspects of growing innovation infrastructure and supporting entrepreneurship are paid great attention to by the government of Singapore. The country boasts one of the best business accelerators in Asia including JFDI.Asia. Unique new acceleration programs of international scale such as HaxAsia are being created.

While a key component for success of any business – an availability of highly skilled human resources – is yet another distinctive feature possessed by Singapore. The country’s ability to attract talents ranks 2nd in the world. And it’s no surprise since the hallmark of Singapore is one of the world’s best healthcare and educational systems. Above ninety per cent of tech companies from Fortune 1000 have offices in Singapore. It occupies an advantageous strategic position and utilizes it with skill and so was awarded with epithets like “gateway to Asia”, “international office”, “world trade center”. [6]

In the World Innovation Index of 2016, Russia did not just join the 50 most innovation intensive countries it took the 12th place among them. A significant potential for innovation in Russia, in opinion of the Index’s authors, is in one of major innovation components – in education – which is traditionally of high quality in Russia. In such an indicator as a share of high school graduates with engineering, technical and scientific professions Russia is among the leaders. [4]

A major challenge Russia is facing today is a transition of economy to an innovations based model of growth by building up a “new economy”, an “economy of innovations”. Main factors that might contribute to it are determined by an already existing strategy of the country’s development till 2020. What’s worth of special attention is the region of the Far East – a vast economic area with a strategic geopolitical position crucial for Russia and having huge natural resources that carry the export potential. The region is interested in significant investment, therefore a bill on Creating the Areas
of Advancing Social and Economic Development (AASED) to include special legal forms for doing business has been passed. AASEDs are also meant to provide benefits in lease payments, a right for firsthand connection to infrastructure, application of free customs zone procedure, release from taxes on property of companies and land tax, zero or reduced value tax on mineral resource exploration for 10 years and beneficial tariffs for premium payments that would reduce to 7.6% instead of the existing 30%. The bill introduces a special procedure for business in urban development, a simplified preparation and approval for paperwork of territory layout, reduced time allowed for state environmental expert evaluation. The strategy builds on innovations growth scenario; the region is creating the high tech platforms for business development.

**Summary**

Therefore, the Asian region presents a full spectrum of innovations that depends not only on a country’s economic position while on its cultural background. All this experience can become a beacon for reforms in the countries of the Eastern Europe aimed at innovation.

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The article presents the results of empirical research related to determinants of innovation (conducted in Poland). The author concentrate on one of the most important determinant: core values. Both practitioners and theoreticians deal with the problems of managing innovation, seeking its determinants which can emerge by minimizing barriers to the creation and implementation of innovations. Core values is a decisive factor for a company’s innovativeness and performance. The purpose of this article is to present how the core values is supporting business innovation.

Keywords: Core values, innovation, research

Introduction
There is widespread agreement among authors, researchers, consultants and thinkers in the field of management that innovation is the central capability for all organisations interested in maximizing the opportunities for success in the 21st century. However, as J. de Cagna said, while the pursuit of innovation cannot absolutely guarantee meaningful growth, it is the best strategy most enterprises have for achieving it in a way can become sustainable over time [Cagna 2007]. Both practitioners and theoreticians deal with the problems of managing innovation, seeking its determinants which can emerge by minimising barriers to the creation and implementation of innovations. Core values are a decisive factor for a company’s innovation and performance. On the other hand, innovation can be practised as well as learned. The goal of researchers is to show how to formulate and implement each determinants of innovation (i.e. core values) to promote the development of innovations and their effective use in the development of the long-term value of an organisation.
Corporate values

Dynamic and rapidly changing environment requires flexible adaptation from organisations, however D. Kolb (2003) believes that certain elements aimed at sustaining the continuity are essential. He also pointed to the danger of separating the organisations’ present and future from their past. According to his point of view, the meaning of current changes and future aspirations is a link between the past, the present and the future [Kolb 2003]. Bratnicki M. (2002) presents a view that: In the section of time the basic attributes of the organization are [...] durability and flexibility [...]. Satisfying the needs for flexibility is interrupted by durability of functions and organizational processes, while maintaining the stability leads to the perdition of flexibility (M. Bratnicki 2002, p. 77).

Thus it seems relevant to identify factors that could provide organizational continuity. Due to the fact that structural factors such as the strategy and the operating procedures undergo permanent changes –continuity cannot be created in an organization.

One can speak about ensuring the organizational continuity when there is awareness of core values in an organization, as well as when all of the employees take part in creating the vision of the organization. Moreover, all members of the organization must share the vision, and it must be derived from their aspirations and dreams. Everyone in the organization must know what actions contribute to the realization of the vision [Zgrzywa-Ziemak 2009, s. 159]. The awareness of what is core and constant facilitates changes in all other scopes of the organization. For such changes to be constant, it is essential to set up and follow the common vision of the organization derived from core values, constituting a challenge against the present at the same time. As a result, the most important corporate issues resulting from its past are included in its dreams and aspirations. The changes in an organization are directed by the vision of the organization and occur from the perspective of the core values. The factors which encourage an organization to implement changes can ensure the actual organizational growth only when they are integrated with those elements which ensure the continuity of the organization. The core values and the vision, which arise from them, integrate and direct the organization’s actions, and thus they: constitute a foundation for creating the common meaning of the organization through diversified subcultures; allow for the structures to provide the members of the organization with the maximum freedom of action; direct initiative of grass-root leaders; make the strategy not only a chaotic search for opportunities, but in the face of common goal and the direction of action it can also become characterized by intensity; they filter processes which seek knowledge, limiting the number of distributed and remembered information and facilitating their use in action. [Zgrzywa-Ziemak, 2009, s. 174–175].

L. Krzyżanowski (1999) defines a value as a product of feelings, convictions and beliefs of a subject such as: a human being, a social group; a local, national or other cultural community or a global population, on what is positively received, desired and worth striving for in a natural and psycho-cultural reality (Krzyżanowski 1999, s. 205).
However J. C. Collins i J. I. Porras (2003) define core values as: basic and long-lasting principles of action of an organization, which cannot be abandoned for the sake of a bigger profit or reaching short-term goals. They should not be mistaken for apt operational actions. [Collins, Porras 2003, s. 89]. M. Scheler (1987) divides values into objective and prescriptive (morally binding). Morality means choosing an option which is in line with the hierarchy of values. It means that the higher the value, the more lasting it is, less dependent on an organism, it is more pleasing and is more easily shared with other people, which means (acting accordingly) without even thinking. T. Watson, a former IBM president, characterized the role of core values as early as in 1963: every organization which wants to survive and succeed should create some convictions which will lay the grounds for its organizational policy and its actions. According to the author the most important success factor was to stay true to these convictions. An organization which wants to face the challenges of the changeable world must be ready to change everything but such convictions [T. J. Peters, R. H. Waterman 1982, s. 280]. Moreover, T. Watson believed that an organization which wants to use the potential of its employees (their talent and energy) to the fullest must find a reason for an action which would be common to them and point actions to the right direction. It is this role that the core values should play and to which the organization should always stay true [Collins, Porras 2003, s. 89.] It is not a separate case, T. J. Peters i R. H. Waterman, who characterized ideal enterprises believed that the concentration on key values is one of the most important characteristics of such enterprises.

The main function of mega values makes it easier for the organization to be set deeper in the reality, thus ensuring its continuity through the reduction of uncertainty. Mega values are a milestone influencing not only the organizational culture, but also the strategy and leadership, management style, organizational structure etc. [Hopej 2006, s. 61]. C. Collins and J. I. Porras (2003) even call them the primal values. What it means is that everything else in an organization (organizational culture, modes of operation, guidelines) is secondary to them. Such an understanding of the notion corresponds with the notions of fundamental values, defined by P. Lencione as: deeply-rooted principles that facilitate the company’s operation and constitute a foundation for its organizational culture [Lencioni 2004, s. 122]. Furthermore, an appropriate system of values distinguishes an organization from the competitors in a great way, it creates its identity, and, as T. Watson has already pointed out, it joins employees [M. Bratnicki 2002; A. Devero 2003; P.M. Lencioni 2002]

Mega values should be recognized as autotelic (final), being goals on their own, while the other values, it is to say the indirect values (instrumental ones) constitute the means aiming at the realization of the first ones. What it means is that they must remain unchanged, as they constitute a source of the company’s unique identity, and thus should be defended at all costs. The organizational culture is subject to a change. What changes are the strategies, tactics, actions, company’s policy, however the core values remain the same [Zgrzywa-Ziemak 2009].
Moreover, J. C. Collins and J. I. Porras (2003) point out that such values do not undergo any fashion or trends, they are independent from the market situation. At the same time, they stress the fact that the core ideology cannot be based neither on following other organizations, even the most outstanding ones, nor on following directives made by those from the outside of the company. Which of the above mentioned values can be most practical, most popular or most profitable cannot be based neither on reading managerial literature, nor on some cold calculation [Collins, Porras 2003, s. 90]. The authenticity of convictions if a key here [Collins, Porras 2003, s. 91]. The core values can have their source within the organization, they can result from the true convictions (from what people believe in) or arise from a vision. It does not, however, mean that the values cannot change [Collins, Porras 2003; Lencioni 2004]. Moreover, the key values should be present in an organization [Collins, Porras 2003; Devero 2003; Lencioni 2002 i 2004, Wynett 2008, Disney], and the employees should identify themselves with them to a great extent [Collins, Porras 2003]. T. Peters, R. Waterman (1982) reckon that the most important issue is how strong the employees’ belief in values is, and therefore to what extent they act in accordance with them. Everyone in an organization – on every level of hierarchy, in every place and moment – must understand and share the same set of values.

A. Devero (2003) maintains that the core values should be regularly promoted and discussed, as well as their meaning should be retained and such knowledge should be spread through the whole organization. Such result is achieved through the development of specific practices, an action pattern. These values must be present in all the types of artifacts: physical (e.g. values printed on t-shirts), language (in stories, myths, legends, tales, metaphors), as well as behavioral (during daily routines) [Peters, Waterman 1982; Collins, Porras 2003; Lencioni 2004].

T. Peters and R. Waterman (1984) believe that the key values should be also expressed in reports and different kind of organizational publications. Furthermore, they cannot be just some empty words, propagated only by the management. The employees must know that the management’s actions are based on the key values, in other words they must be the living examples of acting in accordance with the key values. The procedures in general, the decisions taken by the managers of every lever, should confirm the core values, or else they would be treated by other employees as a hypocrisy [Devero 2003; Lencioni 2004].

As is it with the majority of elements in an organization, it is not enough for a good project to be created and implemented, it is also required to design a precise system assessing the execution of the values. A. Devero (2003) reckons that reporting cannot limit itself to the financial area, as it usually does, but it should encompass such fields (although less common) as: being environmentally-friendly, employees’ morale, work environment and their concordance with the values. What is more, Devero maintains that creating an organization based on values is a sport for long distance runners, rather than sprinters. Cagna (2007) has the opinion that the only way to truly make innova-
tion work both today and in the years ahead is to engage the whole organisation effort, i.e. everyone has a role to play in the work of innovation. Therefore everyone has to be deeply convinced that innovation lies at the core of all activities of the organisation.

The author believes that if the elements of knowledge and innovation management are included in the core values, they will constitute a foundation for the employees’ engagement, and at the same time the expenditure on their control would be reduced. Moreover, the core values, being a filter for the processes which seek knowledge, limit the number of information which has to be distributed and remembered, this also means that such information would be easier to use in action. Table 1. shows how the common values influence actions of the organization’s employees.

Table 1. The influence of common values on the actions of organization’s employees.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Common values:</th>
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<tbody>
<tr>
<td>Poustner, Causes</td>
<td>– promote high level of corporate loyalty,</td>
</tr>
<tr>
<td></td>
<td>– facilitate consensus on main goals of the organization,</td>
</tr>
<tr>
<td></td>
<td>– stimulate ethical behaviors,</td>
</tr>
<tr>
<td></td>
<td>– reduce the level of stress and tension at work,</td>
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<tr>
<td></td>
<td>– develop strong conviction as to the necessity for personal effectiveness,</td>
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<tr>
<td></td>
<td>– develop satisfaction from being part of the organization,</td>
</tr>
<tr>
<td></td>
<td>– develop team work,</td>
</tr>
<tr>
<td>Steinmann, Schreyögg</td>
<td>(strongly deep-rooted, common and distinct):</td>
</tr>
<tr>
<td></td>
<td>– reducing the complexity of uncertainty,</td>
</tr>
<tr>
<td></td>
<td>– direct the employee’s actions,</td>
</tr>
<tr>
<td></td>
<td>– facilitate consensus between the organization’s and its employee’s goals,</td>
</tr>
<tr>
<td></td>
<td>– however, may inhibit all actions, idea implementation, which are not in line with them,</td>
</tr>
<tr>
<td>Penc</td>
<td>– can assist in providing the employees and work teams with a broad range of the autonomy of actions,</td>
</tr>
<tr>
<td></td>
<td>– develop the sense of pride in being a member of the organization,</td>
</tr>
<tr>
<td></td>
<td>– encourage team work,</td>
</tr>
<tr>
<td>Collins, Porras</td>
<td>– reduce anxiety,</td>
</tr>
<tr>
<td></td>
<td>– give sense of security and self-confidence,</td>
</tr>
<tr>
<td></td>
<td>– make the employees feel they are members of an elite organization which can achieve everything,</td>
</tr>
</tbody>
</table>


Formulating, implementing and controlling whether the employees act in accordance with the core values is not sufficient. J. Collins, J. Porras (2003), and also P. Lencioni (2004) believe that the employees which are not able to adapt should be laid off. The top management of companies shares this view, e.g. the president of MedPointe believes that the employees who do not seem to fit in the company may fit better in other one [P. Lencioni 2004]. It indicates that by creating key values the possible number of choices that the organization has is smaller, rather than bigger, thus being conservative [Bratnicki 2002; Collins, Porras 2003], it reduces strategic and operational choices [Lencioni 2002].
The criticism of the core values is connected with the flaws of a strong organizational culture. However, it should be noted that the core values are of the autotelic nature, meaning that the organizational culture is secondary to them. Such values constitute a strong and constant ground, around which and for which an organization can evolve, experiment and change – also an organizational culture [A. Zgrzywa-Ziemak 2004].

J. Kotter i J. Heskett (1992) observed that those organizations which created a strategically apt organizational culture, function effectively in a longer time span only if their culture encompasses standards and values which promote innovativeness and change [Zgrzywa-Ziemak 2009]. T. Peters i R. Waterman (1982) also share this point of view. They believe that an organization must create its key values in a conscientious way. Moreover, the type of values is also important, the authors reckon that the right set of values should include among others: orientation on the innovation, a customer and an individual. For the purpose of creating and developing innovation it is essential for the content of the core values to be well thought out. The core values should include such values which would motivate towards development on their own, pointing to the knowledge, experimenting and undermining the status quo, so to say they would correlate with an open organizational culture. The realization of core values requires some effort from all the employees, they should relate to the issues which are controversial and not easy. What it means is that the organizations should not choose those values, which, apart from nice wording, do not motivate their employees to act or do not distinguish it from others [Lencioni 2004]. At the same time J. Collins i J. Porras (2003) point out to the results of studies, which surprised them – namely, as paradox as it may be, it seems that no matter what core values an organization has, they are not important for the accomplishment of its long-lasting size [Collins, Porras 2003]. It is not essential what values are promoted, but the fact that they are indeed followed, that everyone is aware of them, as well as that the organization’s development is concentrated around them and it is preserved in a longer time span [Collins 2003].

A. Devero (2003) points out that after a vision of an organization is postulated, the core values should become the strategic tool of the organization. Due to that fact the process of formulating organization’s vision based on the core values seems to be as important on its own. Maintaining the organization’s identity in time requires not only postulating and following the core values as of today, but also formulating common vision for the future, which would materialize such values in the distant future [Zgrzywa-Ziemak 2009]. The vision is a clearly formulated concept of the future, desired state of the organization; the vision determines what direction the organization should follow, and what it will be like when it gets there [Jobs 1984; Rose 1995; Pedler et al .1997; Senge 2000]. J. Collins and J. Porras (2003) believe that the desired future state of the organization should be derived from a goal (the Big Risky Bold Goal – Collins 2003), which is a significant and very difficult challenge, going beyond the present
Core Values and Innovation – Empirical Research

possibilities of an organization, current trends, strengths and conditions existing in the organization's environment (it is definitely a long-term goal, aimed at realization in 10–30 years). One should remember that the vision is not an inaccessible state, unlike the mission of an organization. The vision constitutes a challenge for an organization, nevertheless it is possible to achieve [Senge 2000; Collins, Porras 2003]. The employees should take part in the process of creating the vision of the organization, the more common it is, the bigger the motivation to act in line with it. P. Senge et al (1994), J. Schade (2004) N. Longenecker (2014) maintains that the employees taking part in creating the vision are emotionally engaged, hence they are aware of the cost incurred for its realization because they have better understanding of it. It is related to creating the common understanding for the matters that are important, and also the reason for which they are so [Senge et al 1994, J. Schade (2004)]. Collins shares this view – claiming that the understanding is a key to the creation of Big Risky Bold Goal, which will motivate the employees [Collins 2003].

To sum up, the organizations which maintain their own core values along with the core goal, while their operational strategies and practices are constantly adapting to the changing world, do not collapse. It is a magical power – to maintain ideology and stimulate progress [Collins 2003]. Moreover, G. Hamel and C. K. Prahalad (1999) point out that the organizations should postulate goals which will constitute grounds, in a longer period of time, for the strategic goal, as to take advantage of the effect of culmination. Therefore, the development of the common vision of an organization based on the core values integrates actions of all the employees, assuring their understanding and, as a result, the engagement in actions being in line with its spirits. It can be assumed that for the organizations which not only want to survive in a dynamically changing environment, but also to develop – assuring the continuity of the organization is a vital issue. This gives an opportunity to specify actions, concentrating them on the values which are most important for the organization, as well as to verify those elements that do not support such values. It enables the organizational changes without undermining the organization's identity. The following hypothesis was postulated: the more the awareness of core values is, the greater the organizational innovation is. The hypothesis was empirically verified.

Innovation

There are different approaches to innovation, related to different scientific disciplines in which this term originated (in organisation theory, economics, sociology, technology). Most authors emphasise the aspects of the organisation’s search for new solutions in response to changes in the environment (both changes in customer needs and changes in organisational environment elements such as technology). Innovation is commonly interpreted as the introduction of a new product and is associated with the production process, especially technology. More rarely is it related to organisational,
administrative and cultural changes (W. Janasz 2003). The differences in the definition of this concept are also determined by the understanding of innovation as a process or as a result/outcome of a process. However, most definitions emphasise innovation novelty understood objectively (the macroeconomic view: innovation is something absolutely new, pioneering work) and subjectively (the microeconomic view: it is new to the organisation, developed and implemented regardless of whether such a solution exists in other organisations). Another common element is that innovation has to lead to the success of the organisation by improving the use of resources or generating socio-economic benefits, and thereby to improve the competitive position of the organisation. The word ‘introduced’ is also key here since an important aspect is the implementation of innovation, not just theoretical assumptions or a new idea (A. Pomykalski 2009, K. Walecka-Jankowska 2011). Undoubtedly, innovative activity in organisations should also be reflected in economic profit, personal development of employees, higher job satisfaction, better communication within the organisation, higher group consistency, the increase of knowledge and experience resources, the increase of production and economic indicators (J. Baruk 2006, p. 8).

For the research, it was assumed that innovation is a change in the subjective sense (change is new only for the organisation) leading to an improved product, production process or organisation itself, which was developed to achieve economic or social benefits. Innovation is also the process, in which the final step is to implement new ideas. Thus, innovation is not only the ability of the organisation to create the idea but it should also lead to economic and/or social benefits. It must be completed by the emergence of innovations on the market. The activities related to innovation include changes in both the incremental and radical transformation of the existing solutions. However, the adoption of the subjective understanding allows to achieve a high level of innovation even if the organisation implements the changes that exist in other entities, especially when they contribute to the improvement of the organisation (Walecka-Jankowska 2011).

**Empirical research results**

The general aim of the research was to define the determinants of the organisational innovation, with a particular emphasis on the knowledge management processes. These studies were conducted in Poland and 105 organisations operating in Poland were examined (they were different in terms of size, industry and ownership structure).

One questionnaire was sent to each surveyed organisation with the request that a person with a broad view of the whole organisation (i.e. CEO, management team, quality specialist etc.) fill it in. The questionnaire included questions to measure the level of various determinants of innovations and the level of innovation. The survey also dealt with questions concerning certain characteristics in order to determine the structure of the surveyed organisations (size, the ownership and position of the or-
ganisation). Competent experts (scientists and senior managers) verified the accuracy of the items included in the questionnaire. The experts, independently of one another, made an individual assessment of the questionnaire. Each respondent received a questionnaire and a cover letter (which included the request for help in the research programme, the explanation of the aims and scope of the programme as well as the assurance of anonymity).

To investigate the results of the relation between innovation and corporate values, the author defined key variables. Organizational continuity is built by awareness of core values among employees, which is related to the creation of a shared vision for the organization. The scale of awareness of core values was on the 4st position and the author carried out the item analysis, resting on the discrimination coefficient and Cronbach’s $\alpha$ parameter was 0.839, which bears witness to the very high internal consistency of the scale and the reliability of the measurement (and no items were excluded from the scale). Respondents had to determine whether the organization has core values emphasizing innovation, whether they are deeply rooted and visible, and whether these values, according to which members of the organization act, or exist only on paper (on the Likert scale):

- in your organisation exist (official or non-official) basic values underlying necessity of creative thinking and innovation
- innovation approach (creativity, adaptation to new conditions) in your organisation is strong enough to imagine that for 100 years this values are going to be so important than today
- ignoring rules connected with innovation is going to get employees to troubles
- leaders and managers not only talk about innovation, instead they actively work in this direction.

Second, innovation was measured by the subjective indicator: degree of innovation, which is the degree to which:

- innovation in organisations is higher than in the most important competitors;
- in the organisation there are many ideas to improve organisational procedures;
- in the organisation there are many ideas to improve the technological process;
- in the organisation there are many ideas to improve products/services;
- ideas which emerge in the organisation are often implemented.

In the examination of the impact of a “awareness of core values” on the subjective level of innovation, the regression analysis was performed. All calculations were performed by means of the SPSS for Windows.

The regression analysis showed a significant association between variables: “awareness corporate values” and “the degree of innovation” ($F(1.103) = 60.021, p <0.001$). The variable awareness of corporate values explains almost half of the variance of the variable innovation ($R^2 = 36.8\%$). The relationship between the predictor and the dependent variable is strong and positive ($\beta = 0.83$). The hypothesis was confirmed: the more the core values are aware, the higher innovation is.
Conclusions

Report Core Values 2013 (publicized by On Board PR Ecco Network – 4300 organisations from 13 countries – 360 from Poland) shows that in Poland – innovation is in the second place (31% of organisations) pointed it out as the most important value (just after the quality and before customer satisfaction). In world rank – innovation is on the top of the list – that is for the first time that innovations is more important than quality. That shows that direction is changing – wind of change is blowing into new direction, quality is not enough to provide competitiveness. Organisations must be creative, because it can ensure the distinction and possibility to earn those, who are willing to pay for having a novelty. Moreover organisations must be innovative constantly, as Craig Wynett (from Procter & Gamble) said – What we’ve done to encourage innovation is make it ordinary.

As this research shows to be innovative constantly – core values must be concentrated on innovation, because if the elements of innovation management are included in the core values, they will constitute a foundation for the employees’ engagement, and at the same time the expenditure on their control would be reduced. Moreover, the core values, being a filter for the processes which seek knowledge, limit the number of information which has to be distributed and remembered, this also means that such information would be easier to use in action. Walt Disney said: It is not hard to make decisions when you know what your values are. Core values are also the important item of building brand identity – people think about our product in the way that is desired. Steve Jobs in promotion Apple brand explained: A lot of things have changed. But the – the fundamental values – do not interfere. Apple still embodies what we believed at the outset. Now, more than ever before. (...) The theme of the campaign is “Think different”. That’s what Apple wants to do and it reflects the soul of our company”. A. Robinson and D. Schroeder (2004) think that ideas are the engines of progress. They improve people’s lives by creating better ways to do things. They build and grow successful organizations and keep them healthy and prosperous. Without the ability to get new ideas, an organization stagnates and declines and will eventually be eliminated by competitors who do have fresh ideas.

K. Rek (2013) thinks that changing in the first position of the most important values is connected also with the transformation of consumer behaviour and, more broadly – customers. P. Drucker said that the purpose of business is to create a customer, the business enterprise has two–and only two–basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs [Drucker 1954]. However today customers are different – active, aware of their needs, demanding, seeking for continuous dialogue with organisations but they are also critical and, what is very important less loyal – changeable. You can't just ask customers what they want and then try to give that to them. By the time you get it built, they’ll want something new (Steve Jobs). It means that organisations must face the challenge. These challenges are not only continuous “tracking” the customer – where it is, what it does, what he likes – but above
all constantly surprising – in both form and content. “Victory” innovation among other values indicated by the organisations proves that the positioning of the organisations as an innovator may be an effective strategy especially for companies in the B2B sector [Rek 2013]. This is confirmed by John Seely (form Xerox), who claims that the locus of corporate innovations has been product development. But in times of rapid and unpredictable change, the creation of individual products becomes less important than the creation of a general organizational aptitude for innovation.

**Bibliography**


Implementation of the European Union Climate and Energy Package in the Eurozone Countries

Energy is a vital factor in socio-economic development, seen by many countries as strategic to their future. It is a source of growth for the competitiveness and development of modern economies. The important role of energy stems from the fact that primary energy includes sources used by man in the process of the industrial production of electricity, heat and chemical products. The sources of energy include solid fuels, liquid fuels, nuclear fuels, and so-called renewable fuels (Niedziółka, 2010, p. 7).

This publication attempts to show the progress achieved in the completion of the objectives of the European Union energy and climate package in each Eurozone country. The analysis was carried out on the basis of the targets of the European Union energy and climate policy, formulated in the strategic documents of the EU. These aims have become the basis for the choice of indicators that characterize the energy sector of each Eurozone country.

Introduction

What is broadly referred to as the energy sector includes the processes involved in obtaining energy sources, producing it and delivery to consumers (industrial and communal) (Barcz, 2002, p. 525). It is therefore a general term for all devices associated with energy production, distribution and usage. Therefore, Energetics covers various technology areas, such as: coal mining, oil and gas drilling, crude oil refineries as well as traditional, nuclear, wind and solar power stations, but also complex electrical, heating and gas grids. Moreover, Energetics also includes industrial, office and domestic equipment powered by various forms of energy (Łucki i Misiak, 2010, p. 13).

Regional economic integration in Europe was accompanied by efforts aimed at creating a common energy policy. Its basic aim was to ensure safe energy supply to each
country. The direction of these efforts varied depending on the international situation. The first and second oil crises made it necessary to guarantee safe oil delivery and boosted the search for alternative cost-effective energy sources. Conflicts between Russia and Ukraine brought to the fore the necessity to debate the safety of gas exports. On the other hand, reactor failures in Chernobyl and then Fukushima sparked a debate on the safety of nuclear power stations.

Solutions to the conflict and crisis situations in the energy sector were provided by the climate-energy policy of the European Union complemented by numerous strategies and measures. These focus on guaranteeing the safety of supply, increased competition and sustainable development. Additionally, the European Union measures are accompanied by environmental protection campaigns especially focused on preventing its degradation.

As a consequence of new the criteria, the EU energy economics priorities became: the liberalization of the electrical and gas energy markets, safety of supply to internal markets, changes to the structural types of energy delivery systems taking into account their impact on the environment, and the development of research and modern energy technologies (Wojtkowska-Łodej, 2014b, p. 323).

**Objectives of the European Union climate and energy package**

Two out of three treaties that brought the European Communities into being, the European Coal and Steel Community Treaty and the European Atomic Energy Community Treaty, were both concerned with issues pertaining to what is broadly referred to as the energy sector. Along with the development of regional economic integration within the European Communities framework, efforts were made to create a common energy policy.

Depending on the world economic situation, measures implemented in the 1970s, 1980s and 1990s varied in character. In the first decade of the 21st century a new factor in the discussions and action strategies were attempts to simultaneously take into account issues of energy and climate change. This is also reflected in the objectives of the Treaty on the Functioning of the European Union (Wojtkowska-Łodej, 2014a, pp. 44–45).

The term climate and energy package refers to a total of six acts adopted by the European Commission in 2007 and 2008. The most important of these is the 2007 *An energy policy for Europe* (KOM, 2007), which outlines the strategic targets of the European energy policy (package 3x20%)¹:

- To reduce emissions of greenhouse gases by at least 20% by 2020 taking 1990 emissions as the reference year, and emissions reduction of greenhouse gases by 30% by 2020 in the EU, in the event that a global consensus is reached on the reduction of greenhouse gases,

– To reach 20% of renewable energy in the total energy consumption in the EU by 2020, including 10% biofuels in the total consumption of fuels.
– To increase energy efficiency by 20% by 2020.

In the document, the European Commission emphasized the necessity to secure the competitiveness of the economies of member states through measures such as building an internal energy market which guarantees honest and competitive energy prices for economic operators.

The accepted climate and energy package caused numerous discussions and objections especially from EU countries where:
– the production of electrical and heating energy is by means of hard coal and lignite.
– the level of wealth and further economic growth is accompanied by an increased demand for energy.
– there is a danger of uncompetitiveness as well as moving production in energy-hungry industrial sectors to countries not bound by greenhouse emissions limitations (so-called carbon leakage)\(^2\).

Finally, after lengthy negotiations, a compromise was reached in 2008 regarding the climate and energy package, which confirmed the necessity of the established objectives.

The objectives (3x20%) are an important element in the Europe 2020 economic development strategy: *A strategy for smart, sustainable and inclusive growth*\(^3\) based on increased competitiveness, as well as the competitive low emissions development strategy until 2050 introduced in: *A Roadmap for moving to a competitive low carbon economy in 2050*\(^4\). In this document the European Union established new targets to limit greenhouse gas emissions in 2050 by ca. 80–95% compared with reference year 1990. A gradual achievement of this target has been planned by reducing emissions by 25% in 2020, 40% in 2030, 60% in 2040 and 80% by 2050, which is consistent with the accepted goal of building a low emissions economy over the next 30 years.

In January 2014 the European Commission introduced the objectives of the next climate and energy package until 2030. Two targets were proposed: to reduce greenhouse emissions by 40%, and to increase the proportion of renewable energy to 27% without specific limits on a national level. The debate that started in March 2014 about the future EU strategy (*Green Paper on a 2030 framework for climate and energy policies*) turned out to be problematic. Union targets regarding climate and energy policy until 2020 are clearly defined (3x20% package). They are based on 3 main objectives: competitiveness, sustainability, and security of supply. At the start of the debate a controversy emerged whether

\(^2\) [http://ec.europa.eu/clima/policies/ets/cap/leakage/index_en.htm, 01.04.2015.]


the European Union should only adopt one binding target – to reduce greenhouse emissions, or whether it should maintain all existing targets (Gawlikowska-Fyk, 2014, p. 1).

The objectives introduced by the European Commission regarding competitiveness, sustainability, and security of supply were then described in a framework programme: *A policy framework for climate and energy in the period from 2020 to 2030*. The need to outline the climate and energy policy until 2030, which is outside the current compulsory 2020 package, was substantiated by:

- the necessity to reach ambitious goals based on an approach which is rational in terms of costs and refers to issues of affordability, competitiveness, sustainability, and security of supply,
- ensuring that member states can exercise flexibility based on their individual needs in how they reach low emissions, choose their own energy-mix and meet their security of supply needs, while minimalizing costs,
- strengthening regional collaboration between member states, which will help to solve common climate and energy challenges in a more cost effective way, while improving market integration and preventing disruptions,
- the necessity to dynamically develop renewable energy sources through policy based on cost rationalization,
- outlining the Union framework targets and instruments used to implement them, in a way that prioritizes industrial competitiveness and affordability for consumers,
- improving energy security – by simultaneously building low emission but also competitive energy systems – through collaborative projects, integrated markets, diversification of foreign suppliers, sustainable development of local energy sources, investment in essential infrastructure, savings for the end consumer, as well as support for research and innovation,
- improving the feeling of security for investors by providing clear signals regarding changes to the policy framework after 2020.

In 2014 the European Commission also introduced the *European Energy Security Strategy*, which mainly covers the security of supply in the European Union. The solutions also include an aspect of the security of supply of energy for every member state.

In October 2014 at a summit in Brussels, Union leaders agreed that by 2030 the EU will limit CO₂ emissions by at least 40% compared with 1990. Additionally, as part of the new energy and climate package it was decided that free emissions permits for energy production will be valid after 2020, rather than 2019 as was previously established.

Implementation of the European Union Climate and Energy Package...

It should be emphasised that after becoming the leader of the European Commission J. C. Juncker introduced the so called investment plan (Juncker, 2014), which was based on 10 priorities: 1. A new boost for jobs, growth and investment, 2. A connected digital single market, 3. A resilient Energy Union with a forward-looking climate change policy, 4. A deeper and fairer internal market with a strengthened industrial base, 5. A deeper and fairer Economic and Monetary Union, 6. A reasonable and balanced free trade agreement with the USA, 7. An area of justice and fundamental rights based on mutual trust, 8. Towards a new policy on migration, 9. A stronger global position, 10. A Union of democratic change. It should therefore be noted that the direction recently adopted in the framework of climate and energy will also be consistently implemented by the European Commission 2014–2019.

Energy sector characteristics in Eurozone countries

In 2013 the European Union (EU-28) was the fourth biggest energy producer (5.8%), behind China (19.2%), USA (13.8%) and Russia (9.8%). In 2013, primary energy production in the EU stood at 790 million tons of oil equivalent and was 15% lower than in 2004. In the first decade of the 21st century the drop in energy production was gradual. An exception was the year 2009, when energy production dropped around 5% in relation to 2008. This was partly the effect of the global crisis, and a drop in the demand for energy in certain Member States. An additional reason for the gradual drop in energy production could be ascribed to the industry, namely the problems faced by suppliers in the oil and gas sector.

The structure of the world’s energy sources has remained unchanged for decades. It is mainly based on the location of energy resources as well as strategic political decisions, which have the biggest influence on the development of the nuclear and renewable energy sectors. In 2013, the part played by petroleum and petroleum products worldwide stood at 30.9%, solid fuels 29.4%, gas 21.3%, renewable energy 13.4%, and nuclear energy 4.7%. Also noticeable is the steady increase in the consumption of oil, fossil fuels, gas and renewable sources since 1995. An exception to this is the part played by nuclear energy, which in 2013 dropped by 9% in relation to 2010.

In the European Union, the situation is slightly different. In 2013, the percentage of petroleum and petroleum products used in the production of energy was 10.6%, solid fuels 19.5%, gas 16.4%, renewable sources 23.9% and nuclear energy 28.1%. Renewable energy sources and nuclear energy, therefore, constitute half of the energy production in the EU. It must be noted that 48% of the EU energy sector is dependent on fossil fuels, which produce the most CO₂ emissions, which is responsible for climate change. A ma-

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9 [EU energy in figures. Statistical pocketbook 2015, op.cit., p. 11.]
The major difference between the European Union and the rest of the world is the place of oil and oil derivatives (– 20 p.p.), as well as nuclear energy (+ 23 p.p.). This is undoubtedly related to the implementation of the aims of EU energy policy.

Table 1 presents the level of production of primary energy in Eurozone countries compared with the rest of European Union countries in 2014. These data are presented with an indicator of energy per capita in 2013.

### Table 1. Primary energy production (1000 toe; 2014); energy indicator per capita (kgoe/pc; 2013)

<table>
<thead>
<tr>
<th>Country</th>
<th>2014 energy indicator per capita (kgoe/pc)</th>
<th>2014 energy indicator per capita (kgoe/pc)</th>
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</thead>
<tbody>
<tr>
<td>UE-28</td>
<td>771 682</td>
<td>3 277</td>
</tr>
<tr>
<td>Eurozone (19 countries)</td>
<td>466 038,2</td>
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<tr>
<td>France</td>
<td>135 913</td>
<td>3 935</td>
</tr>
<tr>
<td>Germany</td>
<td>120 832</td>
<td>3 950</td>
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<tr>
<td>United Kingdom</td>
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<tr>
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<td>68 415</td>
<td>4 832</td>
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<td>Poland</td>
<td>66 867</td>
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<td>2 638</td>
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<td>Sweden</td>
<td>34 169</td>
<td></td>
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<tr>
<td>Spain</td>
<td>34 942</td>
<td>2 549</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>29 069</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>26 572</td>
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</tr>
<tr>
<td>Finland</td>
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<td>6 238</td>
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<tr>
<td>Denmark</td>
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<tr>
<td>Belgium</td>
<td>12 214</td>
<td>5 108</td>
</tr>
<tr>
<td>Austria</td>
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<tr>
<td>Hungary</td>
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<tr>
<td>Greece</td>
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<tr>
<td>Slovakia</td>
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<td>3 189</td>
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<tr>
<td>Portugal</td>
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<tr>
<td>Estonia</td>
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<td>5 077</td>
</tr>
<tr>
<td>Croatia</td>
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<tr>
<td>Slovenia</td>
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<tr>
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<td>Latvia</td>
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<td>Lithuania</td>
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<td>2 261</td>
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<td>Luxembourg</td>
<td>153</td>
<td>7 953</td>
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<tr>
<td>Cyprus</td>
<td>118</td>
<td>2 540</td>
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</tbody>
</table>
Analysis of the data presented in Table 1 above shows that over half of the energy is produced in Eurozone countries. The biggest producers in the EU are the EU-15 countries, among them two that belong to the Eurozone: France, Germany and Great Britain. Keeping the data in mind, it should be noted the level of energy production is not an ideal measure of the economic situation of a country, especially its energy sector. Hence the use of the per capita energy indicator, which is one of numerous indicators showing the economic development of a country. An accurate indicator of the development of modern economies is the growth in energy consumption per resident in developed countries. In recent years, within the Eurozone definite signs of growth in energy usage per resident can be noted in the following countries: Greece (1995: 2244, 2000: 2591, 2005: 2832, 2010: 2575, 2011: 2499, 2012: 2493, 2013: 2209), Latvia (respectively: 1860, 1632, 2051, 2207, 2126, 2231, 2219), Lithuania (respectively: 2380, 2018, 2622, 2191, 2312, 2376, 2261), Netherlands (respectively: 4700, 4746, 4993, 5214, 4805, 4882, 4832). The observed increase in the level of the indicator in question is not statistically significant and confirms the tendency of decreased energy demand in EU countries as observed earlier. Additionally in all the countries covered by the analysis there were periods of a small drop in energy consumption per capita.

The level of primary energy production in a country is one of many widely used indicators which show the state of the energy sector of a given economy. An analysis of the energy market has to be broadened through the use of other indicators. One such indicator is the level of fossil fuel imports. European Union countries possess modest energy resources, which necessitates their import. Table 2 presents the scale of fossil fuel imports by the European Union in 2000, 2005, 2010, 2012 and 2013. 1995 was used as the reference year.


<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>fossil fuel</td>
<td>114%</td>
<td>136%</td>
<td>120%</td>
<td>136%</td>
<td>148%</td>
</tr>
<tr>
<td>crude oil and oil products</td>
<td>109%</td>
<td>119%</td>
<td>115%</td>
<td>113%</td>
<td>112%</td>
</tr>
<tr>
<td>gas</td>
<td>135%</td>
<td>180%</td>
<td>203%</td>
<td>192%</td>
<td>189%</td>
</tr>
</tbody>
</table>

Source: own elaboration based on Eurostat data: EU energy in figures. Statistical pocketbook 2015, op.cit., p. 45 & following.

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An analysis of the data found in Table 2 reveals that changes in the levels of fossil fuel imports in the European Union have varied since 1995. Until 2005, there was consistent growth in fossil fuel imports into the European Union. The situation changed with the joining of the Central and East European countries in 2004. After 2005, a drop in fossil fuel imports was recorded, linked to the EU being joined by Poland, which is rich in this resource. After 2010, with the economic recovery and efforts to increase the competitiveness of the European economy, a new growth in the import of this resource was observed. Regarding imports of crude oil, there has been a steady decline in the imports of this resource, which is consistent with the objectives of the European Union energy policy, and specifically its efforts to ensure the security of supply of energy to the EU. Also, the drop in the import of natural gas after 2010 is linked to the completion of EU energy policy objectives and the international situation, especially the increasingly difficult economic collaboration with the main partner – Russia.

Another indicator which can be used to complete the analysis of the energy sectors of Eurozone countries is the level of energy fuel import in particular countries within the zone, as presented in chart 1.

**Chart 1. Energy fuel import in Eurozone countries (1000 toe; 2013)**

![Energy fuel import in Eurozone countries](chart1.png)


In 2013, the highest share of energy fuel imports in the Eurozone was recorded by Germany (251 750 toe), which constituted about 17% of the total fuel imports for all the EU-28 countries (1 444 791 toe). Also Holland, Italy, France, Spain and Belgium recorded high levels of this indicator.
Another indicator which characterizes the energy sector of a given economy and completes the information regarding the levels of import of energy fuels is the energy dependency indicator. This indicator presents the level by which the economy depends on energy fuel imports to fulfill the energy needs of the given country. It is calculated as a ratio of import to the total national consumption of energy. The chart 2 contains dependency energy indicators for Eurozone countries in 2013.

**Chart 2. Energy dependency of Eurozone countries (%, 2013)**

Data analysis of the above chart reveals that the dependency on energy imports in the majority of Eurozone countries exceeds the average for the whole of the European Union (53.4%). In 2013 the most dependent were Malta, Luxembourg, Cyprus and Ireland. Only six Eurozone countries recorded a lower level of this indicator compared with the Union average. Since 2005, dependency on imports has been growing in the European Union. However, it should be noted that from 2005 the increase in energy dependency is rather small when compared to the increase in dependency prior to 2004, which is linked with efforts to diversify energy sources and the creation of a common energy market. Undoubtedly, the global economic crisis had an influence on the situation, as it caused a drop in production in some countries and consequently a drop in the demand for energy.

Taking into account the EU-15 countries and both the Eurozone countries, the energy import indicator exceeded the Union average in 2013 in countries such as: Lux-

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emburg (96.9%), Ireland (89%), Belgium (74%), Italy (76.9%), Portugal (73.5%), Germany (62.7%), Austria (62.3%) and Greece (62.1%), which testifies to the ongoing dependency of these economies on energy imports, despite taking part in implementing the European Union energy policies for many years.

Another interesting energy sector indicator is the energy intensity indicator for a given economy. It is a measure of the effectiveness of national energy economy calculated as a unit of energy (use of primary energy) in relation to a unit of the GDP (the value of the GDP). A high level of the energy intensity indicator translates to high prices and production costs. The energy intensity of an economy is mainly dependent on industry network structures, the processing technologies in use, energy prices and production quality. Reductions in energy intensity should therefore occur through changes in industry structure, improvements in energy efficiency and the introduction and support of advanced technologies.

In 2013, 129 kg of crude oil equivalent was needed in the European Union to produce 1000 Euro GDP (13% less than in 2004). Around 32% of the final energy consumption in the European Union was due to transport, 26.8% households, 25.1% industry, 13.8% service sector and 2.3% due to agriculture.

Chart 3. Energy intensity of Eurozone countries (koe/1000 €; 2013)


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12 As the chart 2.
14 Ibidem, p. 81.
The energy intensity indicator for Eurozone countries in the year 2013 is presented in Chart 3. An analysis of the data from the chart leads to the conclusion that in 2013 the countries with the highest energy intensity in the Eurozone were: Estonia, Slovakia, Latvia, Lithuania and Finland. It is interesting to note that the indicator level for the majority of Eurozone countries was higher than the European Union average for that year. In the Eurozone, the highest levels of energy intensity are predominantly observed in the EU-13 countries. It shows the necessity of taking additional actions to increase energy efficiency which stimulates economic growth. Most attention should be paid to insulating homes, installation of new, energy-efficient equipment and renovation of buildings.

**Low emission economies**

One of the main objectives of the current climate and energy package is the reduction in the emissions of greenhouse gases by at least 20% compared to 1990. In light of the Kyoto Protocol, countries that are Parties to the treaty commit to the reduction in the emission of seven greenhouse gases, i.e.: carbon dioxide, methane, nitrous oxide, fluorocarbons among them hydrofluorocarbons and perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride\(^{15}\).

**Chart 4.** Greenhouse gas emissions in 2013 in Eurozone countries compared with reference year 1990 (1990 = 100)

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The chart 4 above shows the levels of greenhouse emissions in each of the Eurozone countries in 2013. The target for greenhouse emissions reduction set by the European Union, which is still in place, is also shown. From the data, it can be seen that most Eurozone countries will have to take further steps to reduce greenhouse gas emissions. Countries where these steps will have to be the most radical are: Cyprus, Malta, Spain, Portugal, as well as Ireland and Austria.

The 3x20% package, which is currently in place, states that one of its goals is the increase of renewable energy to 20% of the overall usage (in the electrical, heating and transport energy sectors), with a 10% share of bio-fuels used in transport, compared with the year 2006. However, realistic capabilities of individual countries were taken into account and national category plans were applied by which countries independently set the level of the indicator they are targeting. Levels across the Union vary considerably.

Chart 5 presents the share of renewable energy sources in the final gross energy consumption in the different countries belonging to the Eurozone in 2013 with regards to national plans for 2020.

**Chart 5. Share of renewable energy sources in the final gross energy consumption compared with national targets for 2020 (in %)**

An analysis of the data shown in the above chart leads to the conclusion that the plan to increase the share of renewable energy sources in the final energy consumption has only been completed by two Eurozone countries, i.e. Estonia and Lithuania. Furthest
Implementation of the European Union Climate and Energy Package...

from fulfilling the national plans was Holland (difference of 9.5 p.p.), France (difference of 8.8 p.p.), Ireland (difference of 8.2 p.p.) and Luxemburg (difference of 7.4 p.p.)\(^\text{16}\).

From among the EU-13 countries that belong to the Eurozone, the furthest from fulfilling the accepted levels regarding the share of renewable energy sources in the final energy consumption is Malta (the difference between the plan and its completion in 2013 measured 6.2 p.p.), and Cyprus (4.9 p.p.)\(^\text{17}\).

From Chart 5 above it can also be concluded that the highest target for renewable energy sources in the overall energy consumption of a country among Eurozone countries was set by Latvia at 40%. On the other hand the lowest was Malta at 10%.

Conclusions

The documents accepted in the recent years as the framework for climate and energy policy determine the direction of the efforts of the European Union for the next 30 years, which can be described as so-called green growth and sustainable development. The establishment at the Brussels Summit of 2014 of further limitations on CO2 emissions by at least 40% by 2030 compared to 1990 requires further detailed legislative work, which will ensure reaching this target.

The European Union is making attempts to become a world leader in environment protection. It is vital as climate and energy issues affect economic foundations and therefore play a key role in the competitiveness of an economy. In literature on the subject, emphasis is placed on the positive as well as negative aspects of EU initiatives. The positive aspects are (Riedel, 2014, p. 289–290):

- the EU is one of the technology leaders of the so-called green economy, which means that a competitive advantage can be built in this segment of the economy,
- it is the only organisation able to pass legislation in the field of environment conversation and energy policy which is simultaneously binding for all member states,
- it is a leader in implementing pro-ecology policies.

Attempts to create a long-term climate and energy framework reaching 2050 have to be seen as a positive influence on the functioning of economic entities. The defined direction and priorities establish a stable framework for business and confidence in the direction chosen by the European Union.

There are also views that the accepted climate and energy policy, which places long-term commitments on member states, is costly and inconsistent. The system of emissions trading, the required ratio of renewable energy sources in overall energy consumption, and energy intensity might cause an increase in energy prices, which will in turn lead to a decrease in the competiveness of some economies, including Eurozone countries.

\(^{16}\) As the chart 5.

\(^{17}\) As the chart 7.
It is also thought that in the current global crisis, which has been around for a few years, the targets of the climate and energy policy of the European Union have begun to clash with the economic development of some member states. The direction chosen by the European Union has begun to give way to economic pragmatism and industrial policies whose main priority is reindustrialization based on cheap energy.

The rate of change in the energy sectors of the Eurozone states is varied. The preparations of the next climate and energy framework by the European Commission should take into account the energy sectors of each country – both those within the Eurozone, but more importantly those from the Central Eastern Europe region. Failing that, the interests of each country will become more important than fulfilling the targets of the common climate and energy policy.

Summing up, it needs to emphasized that the measures suggested by the European Commission are long-term instruments of the climate and energy policy, which should be kept in mind when assessing them.

Bibliography


Riedel R. (2014), Konkurencyjność Unii Europejskiej w globalizującym się świecie (:


Environmentally Friendly Solutions in Courier Companies:
Selected Aspects

The article describes examples of environmentally friendly actions taken by courier companies. Companies that report their strategies of sustainable development have been putting increasing emphasis on environmental aspects. Some of them are courier companies that, aware of their impact on increase in air pollution and climate warming, introduce more and more environmentally friendly solutions. These actions include, among other things, optimizing the logistics network, modernizing the fleet or executing the greenhouse gas emission reduction strategy.

“We have not inherited Earth from our ancestors – we have borrowed it from our children... “

Concept of sustainable development

Recently, excessive exploitation of the natural environment has reached an alarming level. The progressive degradation manifests, for instance, as fast growth in the level of emission of pollutants, slope in human health’s quality, smaller possibilities to satisfy economic needs, climate changes, deforestation or extinction of flora and fauna species. The level of ecological impact (the so-called ecological footprint\(^1\)) shows that the use of the

\(^1\) Ecological footprint – a measure of human demand for natural resources of Earth. It defines how many biologically productive areas and maritime areas are necessary to ensure people resources necessary for consumption and to assimilate waste related with this consumption. In an analysis of ecological footprint human demand for resources of the biosphere with the ability of the biosphere to regenerate and provide services is compared. Today, an analysis of ecological footprint is commonly used as the ratio of degree of sustainable development, source: http://www.footprintnetwork.org
The natural environment has increased two or three times above its ability to renewal\(^2\). Some individuals anticipate a global disaster if humanity does not take up firm environmental actions, therefore environmental problem solving has never been as important as now.

The broadly understood environment is a set of elements including the human species and its environment, including animate (biological) and inanimate (physical) components\(^3\). The biological environment includes all living organisms (microorganisms, plants and animals). On the other hand, the physical environment is a geographical surface, geological system, air, soil, climate as well as surface and underground waters. In the environment, a balance between physical and biological elements is assumed. However, this balance is fragile and may be distorted easily by humanity due to excessive use or pollution\(^4\). All species on Earth can survive only as a result of mutual dependencies and cooperation.

The idea of economic development that does not distort significantly and irreversibly the man's living environment, reconciling the laws of nature and the laws of economics, is termed as sustainable development\(^5\). The notion was defined for the first time in the report of the World Commission on Environment and Development “Our Common Future” of 1987. The concept of sustainable development includes much more than only the respect for the natural environment (which is frequently termed as “tacit stakeholder”). It is impossible to protect the natural environment without a simultaneous respect for local laws, principles of democracy and participation in the development of civil society, and aiming at the elimination of poverty and misery. Hence the belief that an effective development strategy of a company has to include to an equal extent the economic, ecological and social dimension\(^6\).

Sustainable development is a concept that combines economic development and fair distribution of arising benefits with social development, environmental protection and reasonable management of natural resources to enable their use also for future generations. The implementation of the idea of sustainable development is thus the search for such solutions for business activities which are socially responsible, ecologically friendly and, at the same time, economically valuable\(^7\). The essence of this concept is the belief that the necessary condition for the survival of a given company in the long run is the satisfaction of social needs by providing products in a manner preventing the degradation of the natural and social capital.

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\(^2\) Jonker J., Rudnicka A., Reichel J., Nowe horyzonty. Przewodnik po społecznej odpowiedzialności i rozwoju zrównoważonym, Centrum Strategii i Rozwoju Impact, Łódź 2011, s. 113

\(^3\) Ibidem, p. 112

\(^4\) Science about the impact of civilization on the environment is defined as environmental science. It was formulated by a Pole, Cracow geologist, Professor Walery Goetl.


The strategy of sustainable development is the basis of responsibility in modern business. At this point, it should be noted that “sustainable development” and “social responsibility” are often used interchangeably. They are distinguished clearly by the standard ISO 26000 Guidance on Social Responsibility, which systematizes knowledge about broadly understood corporate social responsibility. According to the standard, sustainable development is a doctrine of political economics that assumes pursuit of life quality at a level enabled by the present development of civilization. This doctrine assumes that humanity, in particular business representatives, as part of operations, should take account of social, environmental and economic challenges. Awareness and balance of these three areas determine sustainable development. On the other hand, social responsibility focuses on an organization, rather than the world. It is strictly related with sustainable development because the goal of social responsibility of an organization should be organization’s contribution to this idea. Corporate social responsibility does not have to be an additional cost-based factor in a company, but, by becoming a strategy of running business, it should be at the same time an effective mechanism creating value added by stimulating innovation and building competitive advantage.

Key areas in sustainable development actions of a company are:
1) Organizational order.
2) Human rights, namely all rights that are vested in people from the mere fact of being individuals with dignity.
3) Relations with employees, both inside and outside an organization.
4) Natural environment.
5) Fair market practices.
6) Relations with consumers.
7) Social engagement and development.

The Guidelines on Social Responsibility contained in the standard ISO 26000 suggest that responsibility of companies for the natural environment should be perceived very broadly. It is an organization assuming responsibility for the ecological effects of its operations and aiming to eliminate pollutants and emission of harmful substances (which should be measured objectively). Companies should also maximize the effectiveness of use of natural resources and minimize adverse environmental impact. Environmental actions of companies include mainly the following forms:

- Corporate environmental policy
- Environmental audit

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8 http://www.odpowiedzialnafirma.pl/o-csr/iso-26000
9 Ibidem
10 J. Nakonieczna, Społeczna odpowiedzialność przedsiębiorstw międzynarodowych, Difin, Warszawa 2008, s. 72
11 Ibidem, s. 79
• Employee engagement
• Green manufacturing
• Green products

The main and the most important step towards a precise determination of the level of emission of $\text{CO}_2$ and other greenhouse gases (namely gas components of the atmosphere that form the greenhouse effect) is the calculation of carbon footprint for a given process or product. Carbon footprint is the volume of greenhouse gases emitted as a result of human operations (direct and indirect), usually expressed in tons or kilograms of carbon dioxide. Carbon footprint can be determined with regard to individuals, products, services, companies, cities and even entire states. It includes emission of six greenhouse gases (methane, nitrogen suboxide, etc.). The measure of carbon footprint is $\text{tCO}_2\text{e}$—the so-called ton of carbon dioxide equivalent. It makes it possible to compare greenhouse gases in terms of their content of carbon dioxide.

Sustainable development of transport

In the context of general discussions concerning sustainable development, growing interest in the phenomenon of sustainability in different areas of human activity can be noted. According to Gołembska, one of the development directions of international logistics relates to logistics in the strategy of sustainable development. In particular, it applies to transport that belongs to sectors of the economy with the most harmful impact on the natural environment and human health. Transport accounts for one fourth of EU greenhouse gases, is a source of pollutants and noise hazard, and causes fragmentation of habitats. It is the only one from among main sectors of the European economy to record, starting from 1990, growth in the level of greenhouse gas emission. At the same time, transport has the greatest share in emission of nitrogen oxides that are harmful for health and the environment. In addition, road transport is in Europe one of main sources of noise hazard for the environment. According to the strategy of the European Union, EUROPE 2020: A strategy for smart, sustainable and inclusive growth, the actions of the whole group and particular member countries should consist, in the case of sustainable development, in supporting the economy that uses resources more effectively, is more environmentally-friendly and more competitive. In this way, a possibility of prompt, efficient and cheap movement (mobility) of people and goods proves to be the most important element of the EU-set goal which consists in combining dynamic economy with social cohesion. Relations between transport and logistics and the society, the natural environment and the space are extremely important in the light of this strategy (see table 1).

12 Gołembska E., Logistyka międzynarodowa, PWN, Warszawa 2014, s. 204
Table 1. Transport and logistics in the EU sustainable development strategy

<table>
<thead>
<tr>
<th>Strategy of EU sustainable development</th>
<th>transport and logistics in the society</th>
<th>transport and logistics in the nature</th>
<th>transport and logistics in the space</th>
</tr>
</thead>
<tbody>
<tr>
<td>• shortened time of deliveries and transit of passengers</td>
<td>• reduced consumption of resources, including energy and emission of pollutants</td>
<td>• connection of logistics centers with transport networks</td>
<td></td>
</tr>
<tr>
<td>• development of a new quality of partnership in supply chains</td>
<td>• reduced length of transport routes</td>
<td>• restriction in unnecessary carriages</td>
<td></td>
</tr>
</tbody>
</table>

Source: Golembska E., Logistyka międzynarodowa, PWN, Warszawa 2014, s. 205

Sustainable development of transport is a development of transport that\textsuperscript{14}:
\begin{enumerate}
\item provides availability of transport destinations in a way that does not pose hazard to health of people and environment and in a way that makes it possible to satisfy the needs of both present and future generations;
\item makes it possible to operate effectively, offer the possibility of selecting means of transport and sustain economy and regional development;
\item limits emissions and waste as far as its absorption by the soil is possible, consumes renewable energy resources in restorable quantities, consumes non-renewable resources in quantities replaceable by renewable substitutes, minimizing occupancy of the land and noise.
\end{enumerate}

In order to limit the environmental impact of transport in Europe, the European Union has adopted a number of goals, termed popularly as “3 times 20”, which include:
\begin{itemize}
\item achieve to 2020 20% reduction in greenhouse gas emission in the European Union in relation to the emission level from 1990,
\item increase to 2020 energy efficiency by 20%, increase to 2020 the share of energy from renewable sources to 20% of the total consumption of final energy in the EU,
\item achieve at least 10% share of renewable fuels in the consumption of transport fuels.
\end{itemize}

Environmental aspects of companies’ operations

A man, through individual, group (e.g. family) and team actions (as local community, regional community or nation) affects the environment in different ways, causing its temporary (periodical) or fixed burdens\textsuperscript{15}. An action of an organization or its product or service that affect or can affect the environment are termed as environmental aspect. On the other hand, the term environmental impact should be understood as a change


\textsuperscript{15} Zarządzanie środowiskiem, red. B. Poskrobko, PWE, Warszawa 2007, s. 48
in the environment resulting from operations of an organization, its product or service. An environmental impact may be either unfavorable or favorable. The practical meaning of the term “environmental aspect” and “environmental impact” is depicted by the example included in table 2.

**Tab.2. The relation between operations of an organization and its environmental aspects and environmental impact**

<table>
<thead>
<tr>
<th>activity</th>
<th>aspect</th>
<th>impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>motor transport</td>
<td>use of fuel</td>
<td>consumption of non-renewable resources</td>
</tr>
<tr>
<td></td>
<td>exhaust gas emission</td>
<td>atmospheric pollution, greenhouse effect</td>
</tr>
<tr>
<td>air transport</td>
<td>as above + noise emission</td>
<td>adverse impact on bird habitats</td>
</tr>
<tr>
<td>goods warehousing</td>
<td>occupancy of considerable area</td>
<td>limitation of wild nature area</td>
</tr>
</tbody>
</table>


Direct and indirect environmental aspects can be distinguished. Direct environmental aspects relate to impacts of an organization on the environment over which it has full control.

Direct environmental aspects may be identified, among other things, through an analysis of:

- external requirements (legal acts binding upon an organization, obtained permits, binding provisions in contracts with other entities),
- emission of gases and dust to atmosphere,
- emission of noise, vibrations,
- emission of odors,
- unaesthetic visual effects (fumes, fogs, aerosols),
- water pollution,
- waste production, in particular hazardous waste production, and implemented
- waste management,
- soil pollution,
- use of soils,
- use of natural resources,
- energy consumption,
- transport of raw materials, products, waste, people,
- hazards associated with the environmental effects of potential emergency situations,
- impact on biodiversity – e.g., by disturbing the functioning of ecosystems.
On the other hand, in the area of direct aspects, attention can be paid to:

- consumption of office materials,
- provision of office supplies,
- office waste management,
- household waste management (selective collection),
- consumption of utilities (electric and heat power, water).

Actions of an organization, its products and services being beyond full control of an organization can also have a significant environmental impact. They are termed as indirect environmental aspects.

A useful tool of creating the culture of sustainable development and effective management of available resources and energy in organizations is EMAS (Eco Management and Audit Scheme). It is a EU environmental protection instrument, based on the Regulation of the European Parliament and of the Council (EC) No. 1221/2009 of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS). It is targeted at all types of organizations that are interested in the implementation of complex solutions in the field of environmental protection. The EMAS requirements give instructions thanks to which organizations may arrange their responsibilities in the field of environmental protection, optimize borne costs and manage effectively energy and resources. EMAS can be used also for reporting environmental impacts of an organization, which facilitates open dialogue with stakeholders\textsuperscript{16}.

**Selected environmental actions in courier companies**

Recently, a remarkable growth in the popularity of consumer purchases by means of the Internet can be noted. The research indicates that substantially every second Pole makes purchases in this way\textsuperscript{17}. A purchased item must be delivered to the customer. As mentioned earlier, the transport industry has a great share in the global emission of carbon dioxide, and because of that environmental actions should constitute one of the elements of the transport and logistics companies' strategy. Therefore, below will be presented solutions implemented by courier companies in this respect.

The market of express services in Poland is relatively young, since the first courier companies in Poland began to appear as late as in the 1980s. Currently, the Polish market of courier services is dominated by large, international corporations. The most important trend in courier services is growing importance of modern technologies and

\textsuperscript{16} http://emas.gdos.gov.pl/co-to-jest-emas

the Internet. More and more attention is paid to flexibility and speed in adjusting to customer expectations and the principle “the simpler and the faster, the better.”

In recent years, environmentally friendly actions of companies have become one of the most important elements of social responsibility of the Polish business. There is no way to present all actions taken by all companies. For this reason, selected companies and actions will be presented.

**DHL** is a global company with more than 40 years of history which was established in the United States in 1969. For years, the DHL network was developing in the segment of international express services and currently it reaches more than 220 countries. Since 1991, DHL has provided supply chain services in Poland. Today, the company is part of the group Deutsche Post DHL and operates express carriages to customers that operate on an international scale. DHL Express is the leader of air and sea freight and one of the largest companies in the industry. It has one of the largest airlines in the world, 3 global transshipment centers, the Global Quality Center (QCC) and 2 world’s data centers.

For many years, the Deutsche Post DHL Group, which DHL belongs to, has been taking actions aimed to maintain balance between the economy, the society and the environment. Environmental actions are extremely important for the company, both on a global and local scale. Socially responsible business in DHL is an effect of a long-term strategy and is based on the principles of social dialogue and search for solutions favorable for the whole environment. Action directions and possibilities of implementing the adopted priorities are included in the 2015 Strategy of the DP DHL Group.

Environmentally friendly actions carried out by DHL GF Poland with regard to Corporate Social Responsibility are consistent with the Global Strategy “Responsible Life”. It is based on three pillars: GoGreen (actions for climate protection), GoHelp (logistics help during man-made and natural disasters), and GoTeach (education and support for road traffic safety).

The key goal of the DHL Group is to minimize adverse environmental impact, with particular focus on control of exhaust gas emission to the atmosphere. The company is sure that not only can the environmental protection and the business success go hand in hand, but they are also strictly interrelated.

In 2008, the global climate protection program GoGreen was implemented worldwide, and the company set a specific goal – to reduce emissions of carbon dioxide per each shipped parcel, transported ton and each used square meter of floor area by 10% to 2012 and then by 30% to 2020, as compared to 2007. All initiatives, both internal and

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Environmentally Friendly Solutions in Courier Companies: Selected Aspects

external, executed by Deutsche Post DHL, include key areas of operations – air transport (modernization of fleet of aircrafts), road transport (innovative technologies and alternative sources of fuels, e.g. hybrid engines, pilot implementation of a program of dynamic courier route management SmartTruck), floor areas (use of natural resources) and services. Progress in the achievement of assumed environmentally friendly goals is monitored.

Thanks to the GoGreen program launch, DHL became the first logistics company in the world to set a measurable goal with regard to climate protection. Caring about the environment and in line with the policy of transparency, DHL Global Forwarding undertakes a number of own actions, and also promotes environmentally friendly attitudes among its customers encouraging them to undertake environmental actions. DHL provides to its customers a wide variety of options of environmentally friendly shipments and the possibility to seek energy efficiency advice. On the other hand, customers may use CO\(_2\) savings to decrease their own carbon footprint. The company offers its customers the possibility of tracking emission of CO\(_2\) (thanks to Track & Trace), as well as a service of generating the so-called carbon reports that show emission of exhaust gases which have the greatest impact on climate changes caused by the logistics industry\(^\text{20}\). Thanks to The Carbon Calculator, it is possible to analyze different options of shipment’s route and choose the one that ensures the lowest emission of carbon dioxide (see Fig. 1).

As it appears from the data of the company, demand for ecological products and services has been growing continuously for years: In 2012, more than 2.4 billion GOGREEN shipments were sent and customers were compensated with approximately 180 000 tons of CO\(_2\) – namely approximately 30% more than in 2011 and over three times more than 2009, when altogether 704 million shipments were sent.

Deutsche Post DHL has been rapidly advancing towards the goal, namely reduction in CO\(_2\) emission in the whole Group – also with regard to transport services provided by subcontractors – by 30% to 2020. To 2012, efficiency improved by 16% as compared to 2007. However, reaching this ambitious environmental goal to 2020 will require lower CO\(_2\) emission from subcontractors that provide transport services – these emissions are the largest group of measured emissions of the Group. For this reason, Deutsche Post DHL established in 2012 cooperation with other leading transport and logistics companies in order to implement the initiative Green Freight Europe, which was developed with a view to increasing sustainability of land transport in Europe.

In 2009, Deutsche Post DHL introduced in the whole Group a carbon accounting and control scheme that was integrated with the accounting department. It enables

\(^{20}\) It is available on the website for all customers of DHL Global Forwarding. It was created on the basis of top standards, consistent with the following protocols: Greenhouse Gas Protocol (GHG Protocol), Corporate Accounting and Reporting Standard oraz Corporate Value Chain (Scope 3) Accounting and Reporting Standard.
making precise statements concerning CO₂ emission, thanks to which improvements can be introduced in drivers’ behaviors and in route planning.

For active support for actions aimed at the protection of the natural environment DHL Global Forwarding was awarded with the Certificate of Responsible Entrepreneur²¹.

**Pic. 1. Three route scenarios calculated with The Carbon Calculator**

![Diagram showing three route scenarios calculated with The Carbon Calculator](http://www.dhl.com/content/dam/downloads/g0/about_us/green_solutions/flyer_dhl_carboncalculator.PDF)

Source: [http://www.dhl.com/content/dam/downloads/g0/about_us/green_solutions/flyer_dhl_carboncalculator.PDF](http://www.dhl.com/content/dam/downloads/g0/about_us/green_solutions/flyer_dhl_carboncalculator.PDF)

Another company from the logistics industry is Direct Parcel Distribution (DPD)²². The acronym DPD originates from the German name Deutscher Paket Dienst, which was established in 1976. Then the explanation of the abbreviation was

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changed to Dynamic Parcel Distribution to emphasize its character of international expansion. DPD Poland is part of the European courier network DPDgroup, being property of the GeoPost holding. The owner of GeoPost is the French Post La Poste.

At the beginning of 2016, the company DPDgroup announced a new CSR strategy, Driving Change, which determines the framework under which the company will act as a socially responsible company. They are the consequence of contemporary challenges – customer expectations, changes in regulations, development of e-commerce and aiming at being the leader also in this area. The new obligation is focused on four areas: environmental neutrality, friendly municipal logistics, innovative entrepreneurship shipments and being closer to community (establishing and building permanent relations with local community).

The goal of DPDgroup is reduction in emission of greenhouse gases arising from courier operations by 10% per every parcel to 2020 (as compared to 2013). The company intends to achieve its goal through:

- optimization of vehicles routes,
- improvement in effectiveness of deliveries thanks to Predict and Pickup network
- the use of vehicles propelled with alternative fuel.

Pursuit of environmental neutrality includes a three-stage program implemented in DPDgroup:

1. measurement of carbon footprint, in order to make right decisions:
   - 90% of the company’s emissions result from its current transport operations
   - restricted consumption of energy, paper and water in DPDgroup offices
   - operations subject to external verification since 2012.
2. to 2020, reduction in CO2 emission in transport by 10%
   - optimization of loading and road network
   - increase in delivery ratio in the first attempt
   - development of ecological awareness of couriers
   - introduction of alternatively propelled vehicles
3. compensation of the remaining emission
   - partnership with EcoAct, leader of offset operations
   - important compensation of CO2 emission in 2012–2014
   - 6 offset projects in Europe, Turkey and India

The new strategy assumes reduced atmospheric emission of carbon dioxide that is created as a result of current courier operations. DPD makes efforts to ensure that each parcel will be delivered without any harm for the natural environment. The goal of DPDgroup is to reduce the level of CO2 before 2020 by 10% per each parcel. The Group takes also care for the quality of its car fleet, as more recent vehicles are characterized by a lower emission of exhaust gases. What is important, these actions do not involve increase in costs for customers. The initiative is implemented in cooperation with the

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company EcoAct, the world leader in the field of consulting concerning carbon dioxide reduction strategies.

DPDgroup makes also efforts to ensure that growth in the service of e-commerce affects the life in cities to the least possible extent. The Group has been developing tools and services that give more possibilities to consignors and consignees of shipments. The Predict service makes it possible to define precisely the moment of shipment delivery and facilitates contact with a courier. The customer may also come to the Pickup point, send or receive a parcel at the most convenient time. *Both solutions make courier logistics in city centers less burdensome for the inhabitants. This is also fostered by pursuit of DPDgroup to maintain as young as possible fleet of vehicles whose fuel consumption and exhaust gas emission parameters fulfill strict requirements.*

Actions of DPDgroup for sustainable development include also reinforcing entrepreneurial attitudes in the company and beyond it. The company bases its operations on close relations with customers and business partners, which fosters creation of innovative solutions beneficial for both parties. The goal of the Group is also to establish cooperation with social non-profit organizations, involved in promotion of innovative entrepreneurship expressed both by specific projects and shaping entrepreneurial attitudes.

Support for environmentally friendly attitudes among the customers is also the domain of the company FedEx. All FedEx envelopes are neutral in terms of carbon dioxide emission: FedEx Express cooperates with a non-profit organization, helping in reduction and neutralization of carbon dioxide emission by investing in compensation for each shipment protected by envelope, excluding additional costs for customers. On the other hand, an automation tool called: Electronic Trade Documents (ETD) enable customers to send their documentation related to international shipments electronically. FedEx ETD limits the need for printing and signing many copies of trade documents, saving time and money of customers, as well as helps them to decrease their effect on the environment. Most FedEx packaging is suitable for recycling and contains recycled materials. For example, a characteristic FedEx envelope is made in 100 percent of recycled cardboards.

Care for the quality of life of future generations, so typical of the idea of sustainable development, is a characteristic feature of the ecological policy of the company Raben and is in a way the motto of its operation: “*We know that we have an impact on the natural environment. We want this impact to be positive. For us ecology is of great importance. Saving natural materials, measuring, reporting and reducing emission of greenhouse gases, we act for common good – the future. We want next generations to have access to the resources we are using now*.”  

Raben encourages users of its services to environmental behaviors, by giving them the possibility of using e-invoices that make it possible to save time, the environment and eliminate the risk of losing a document. It also makes available certified tools to

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24 http://polska.raben-group.com/nasza-odpowiedzialnosc/srodowisko/
measure impact of customers on the environment, e.g. CO2 calculator that makes it possible to determine reliably emission of greenhouse gases and plan exactly greenhouse gas emission reduction goals.

Innovative environmentally friendly solutions are implemented by the courier companies FedEx and TNT\(^{25}\). Electrical delivery vehicles with zero emission operate on all FedEx routes in London and five routes in Paris – electrically supported three-wheeler operate in the downtown neighborhoods of Paris, delivering shipments to the center of the city in environmentally friendly way. The company started also using Boeing 777F aircraft that uses 18 percent less fuel than other freighters and has a greater payload.

On the other hand, under the name of TNT 25 three-wheel bikes transport shipments with max. weight of 350 kg in 9 French cities. An advantage of those vehicles is the possibility to move in city centers without emitting exhaust gases. Three tricycles by Maxitrike operate in the center of Paris – each of them may run at a speed of up to 25km/h. Tricycles are only part of the environmentally friendly fleet of TNT Express in France – apart from them, among other things, 9 electrical vehicles and 10 biofuel-propelled vehicles operate under the name of the company.

Another solution implemented by TNT is an electric van that brings to work employees of the Dutch seat of TNT, propelled with energy produced by the office building. One Fiat Scudo transports employees from the Amsterdam Airport Schiphol to the seat of the company in Hoofddorp (10 km). It shuttles 8 times per day and each time it transports max. 7 passengers. The docking station has been located within the area of the underground car park of the company.

Sustainable development of DB Schenker Logistics in Poland is included in the corporate strategy Schenker 2020. One of its pillars – like in other companies from the industry – is environmental protection and reduction in CO2 emission. The company strives also to reduce the noise level by opening their modern and ergonomic terminals away from city centers, near expressways and motorways. This location – arising from the business strategy of sustainable development of DB Schenker - affects not only quality and effectiveness of logistics operations and safety of customers’ goods but also reduces the level of air pollution in cities, traffic intensity and noise level\(^{26}\).

Assuming responsibility for environmental impact and its conscious management is a profitable investment, which becomes a drive for innovations and a source of savings. The company UPS has been constantly improving technologies, systems and processes and developing employee skills. Examples of such solutions are e.g.:

- telematics (a set of technologies improved by UPS for the purpose of monitoring vehicle’s efficiency) in delivery and freight vehicles;

\(^{25}\) http://crnavigator.com/aktualnosci2346/trycycle_i_energia_z_biurowca_od_tnt.html:

\(^{26}\) http://www.dbschenker.pl/log-pl-pl/start/o-firmie/aktualnosci/nowe_terminale_olsztyn_zielona_gora.html
• technology used to set the route of a package;
• technologically advanced vehicles in the delivery and freight fleet;
• new generation systems used in the fleet of aircrafts (e.g., reduction in flight speed, computer-optimized flight plans, computer-managed times of departure, arrival and taxiing time, fuel-saving tugboats using biofuels, environmentally friendly paints reducing resistance and more ecological engines);
• design and automation of warehouses and air transshipment points increasing fuel savings in facilities and vehicles;
• investing in leading IT tools.

Conclusion

Solving environmental problems has never been as important as now. According to research, the tendency of companies on all continents to adjust, including to reduce emissions of pollutants is high and to 2020 it will be characterized by significant growth\(^{27}\).

There are many ways to restrict emission of carbon dioxide and other signs of environmental impact through transport and storage of goods-optimized routes, vehicles with alternative drives or energy-saving warehouses. The above analysis of environmentally friendly actions shows very high understanding of the problem and activity of courier companies for reduction in their adverse environmental impact.

However, it is necessary to engage all the participants of economic life: the public sector, the business sector and citizens. One way of taking responsibility for one’s environmental impact is thus cooperation with external partners in this respect and active interaction with carefully selected suppliers. Setting requirements concerning not only quality of products and services, but also related to environmental matters, is becoming a standard among the above presented companies with a CSR strategy.

Partnerships for climate protection between companies not engaged in day-to-day cooperation are another way of responding to challenges associated with the environmental protection. In this context it is irrelevant whether companies operate in various industries, compete directly with each other, after all, the goal is common for all of them. An example of such partnership is the Climate Declaration, calling to take up firm actions responding to climate changes\(^{28}\).

A very significant trend among environmentally friendly companies is that they address consumers and encourage them to join environment actions. It has a tremendous importance, since consumers are the ones who are largely responsible for environ-

\(^{27}\) Gołembska E., Logistyka międzynarodowa, op.cit., s. 204

\(^{28}\) http://odpowiedzialnybiznes.pl/publikacje/ekoinnowacje-droga-do-sukcesu-polskich-przedsiębiorstw/
mental impact exerted by products manufactured by companies. This cooperation between a customer and a company can also be seen in the above examples.

It is necessary to encourage better planning of mobility to promote conduct consistent with the principle of sustainable development. Information about all means of transport concerning both travel and transport of goods and possibilities of combining various means of transport and their environmental impact must become widely available.

There is a number of benefits derived by entrepreneurs from environmental actions. The most important, from the point of view of a company, is, certainly, financial benefit arising from reduced fuel consumption, optimized fleet management, synchronized flow of all elements in the supply chain and other elements, selected already for a specific company. Other benefits include, among other things: improved energy efficiency inside a company, partnerships with all possible types of organizations, engaged consumers or, finally, the possibility of continuous, sustainable development. Courier services companies that introduce the strategy of sustainable development get also the image of an entity that cares for the natural environment, employees and pays particular attention to customers and social environment.

It is beyond doubt that natural resources of Earth are not non-exhaustive, and business is one of entities responsible for the condition of Earth and if it wants to endure and develop in the long run it must join the environmental protection movement.

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Project carried out under statutory research in the Department of International Management, Cracow University of Economics
074/WE-KZM/01/2016/S/6074