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Od Redakcji

Szanowni Czytelnicy!

Przekazujemy Wam 27. numer „Zeszytów Naukowych Politechniki Częstochowskiej. Zarządzanie”, który zawiera 17 artykułów wyłącznie w języku angielskim. Problematyka tych tekstów dotyczy przede wszystkim realizacji zagadnień wynikających z badań statutowych prowadzonych przez pracowników Wydziału Zarządzania Politechniki Częstochowskiej oraz naukowców z innych jednostek zewnętrznych.

Przedstawione w niniejszym „Zeszytzie Naukowym” artykuły w wielu przypadkach stanowią rezultat współpracy z krajowymi i zagranicznymi jednostkami naukowo-dydaktycznymi, w ramach której realizowane są różnorodne projekty badawcze. Na podkreślenie w tym obszarze zasługuje długoletnia współpraca z uczelniami węgierskimi, a także badania podjęte z uczelniami ze Słowenii, owocujące artykułami z tego kraju pojawiającymi się po raz pierwszy na łamach naszego czasopisma. Mamy nadzieję, że rozszerzenie współpracy badawczej zapoczątkuje powstaniem nowych pól badań, w których uczestniczyć będą naukowcy z wielu różnych krajów.

Tematyka podejmowana w „Zeszytzie Naukowym” nr 27 koncentruje się na szerokim spektrum zagadnień zarządzania, a na szczególne wyróżnienie zasługują artykuły dotyczące logistyki.

*Maria Nowicka-Skowron
Joanna Nowakowska-Grunt*

From Editors

Dear Readers!

We present the 27th issue of the “Scientific Journal of the Technical University of Częstochowa. Management”, which contains 17 articles exclusively in English. The discourse of problems and topics in the articles mainly concerns the implementation of issues arising from statutory research carried out by the employees of the Faculty of Management at the Częstochowa University of Technology and scientists from other external units.

The articles in the “Scientific Journal” in many cases are the result of cooperation with national and foreign scientific-didactic units, within which various research projects are carried out. A special accent in this area should be put on the long-term cooperation with Hungarian universities, as well as research undertaken with universities from Slovenia, resulting in articles from this country appearing for the first time in our journal. We hope that the extension of research cooperation will result in new research fields in which scientists from many different countries will participate.

The issues discussed in the “Scientific Journal” No. 27 focus on a broad spectrum of management issues, and logistic articles deserve special mention.

*Maria Nowicka-Skowron
Joanna Nowakowska-Grunt*



ASSESSING THE IMPACT OF LARGE RESEARCH PROJECTS

Ana Almansa Martin

Xedera e.U.

Abstract: Assessing the actual impact in the context of research projects constitutes a major challenge from the management point of view. Especially in large scale cooperative projects, an appropriate management can help to ensure the achievement of the objectives. However, the question of whether the initially expected impact is achieved or not remains open. In this paper, we discuss how to deal with this and introduce a methodology for the assessment of impact in research and innovation related projects. The methods discussed are illustrated with the example of the impact study performed in the project 3D-LightTrans.

Keywords: impact, research, innovation

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Introduction

Assessing the real impact in the context of research projects in general, but very especially in European cooperative research, is not only a key issue, but also a major challenge from the management perspective. Contrary to development of engineering projects, where the expected output is to a large extent known in advance, research is often characterized by a wide range of possible answers to an initial question. Especially in the case of high risk-high gain projects, investigation on scientific questions can easily lead to a relative large degree of uncertainty, which makes difficult to predict the actual project impact. As a consequence, the statements on expected impact, which research funding bodies commonly request the applicants to provide, can only be an estimation based on a number of assumptions (e.g. by estimating how many products will be sold worldwide incorporating a given research result – or how many persons will benefit each year from a given resulting process). Indeed, the impact is often only considered at this phase and, once the proposal is approved for funding, no further follow-up is done on whether the impact is achieved or not-nor on how to influence it.

The management of European co-operative research projects involves frequently the follow up of progress, risk assessment and deployment of contingency plans. Nevertheless, this is mostly oriented solely to the monitoring of the degree of achievement of the project objectives, and not to the actual impact that the project will generate. The project objectives are often quantified either in terms of an increase in accuracy, degree of miniaturization, speed, repeatability, efficiency, or in terms of decreased complexity, size, energy consume, etc. referred to a specific target process, system or prototype device. In other cases, the

objectives refer to finding a solution to a specific scientific problem, or being the first ones in demonstrating a technological possibility. Especially in large scale cooperative projects, an appropriate management can help to ensure the achievement of the objectives.

However, the question of whether the initially expected impact is achieved or not remains open. As a matter of fact, the impact is not only affected by the degree of achievement of the project objectives, but also on the evolution of many other aspects of technological, economic, social and environmental nature. The project might fail to achieve the expected impact, for example, as a consequence of the emergence of competing technologies based on different approaches, new standards that might influence the acceptance of the research results, the protection of intellectual property rights through external parties leading to a limitation of the rights of the Consortium's to exploit their newly developed technology, etc. It becomes therefore crucial to assess and review the foreseen impact of the project during the whole project duration, with independence of the monitoring of progress towards achievement of objectives.

Scope, purpose and targeted audience of an impact study

Scope of an impact study

In an impact study research is done on a certain topic to determine if a certain action would, or is, having some sort of an effect on its environment or other related issues. A similar, more specific and much more frequently used term, is "impact assessment". The International Association of Impact Assessment (IAIA) defines impact assessment (IA) as the process of identifying the future consequences of a current or proposed action (*What is Impact ...*, 2010).

The oldest, most well-established aspect of IA, is Environmental Impact Assessment (EIA), which is defined by IAIA as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made". In this context, impact analysis (the process of identifying and predicting the likely effects of the proposal) and environmental impact statement (the final report documenting the impacts, proposed measures for mitigation, significance of effects and others), are defined as a part of the EIA process. Impact assessments can also cover social, economic, health, cultural and biodiversity aspects, among others. The expression Integrated IA is sometimes used when different forms of impacts are covered, whereas the term Sustainability Assessment is also used by some professionals, referring to the integration of the environmental, social and economic dimensions of assessment (*What is Impact ...*, 2010; *Principles of Environmental ...*, 2013).

Purpose and targeted audience

Irrespective of the topic under investigation and of the chosen nomenclature, the first step in any impact study or assessment is to define its purpose and scope.

Generally speaking, the aspects covered, level of detail and scope of an IA depends strongly on the topic subject to analysis, the institution or body preparing it and the objectives pursued. For national or European legislation initiatives, the impact assessment can give decision-makers evidence regarding the need for an action and the advantages and disadvantages of alternative policy choices. In the humanitarian sector, impact assessment can be concerned with making judgments about the effect on beneficiaries of humanitarian interventions, and constitute an integral part of Monitoring and Evaluation frameworks (*Handbook for Monitoring ...*, 2002). Impact analysis of commercial goods and services is often done in the context of economic and environmental sustainability, but it can also include social and socioeconomic sustainability aspects, as discussed in (Benoit, Mazijn (eds.) 2009, p. 33-42). IAs for commercial products and services may give evidence for suppliers, manufacturers and service providers in favor of a given procedure, specific choice of material and product properties, manufacturing technology and process location, among others.

The assessment of impact in publicly funded research projects may have aspects in common with one or more of the impact study types discussed above, but also has many distinguishing aspects. In the light of this, within the scope of research and innovation related projects, we define purpose of this study as follows:

- To inform decision making and result in appropriate levels of economic benefit, environmental protection and community well-being. Decision makers can be: a) persons at a higher management level within the participating companies, b) potential customers and c) other stakeholders. Within the participating companies, the impact study is expected to provide sufficient, reliable and usable information to plan in which way to go ahead with the exploitation of the project results. It can also help in the planning of additional research activities or to decide whether the technology should be modified or applied to other products in a future. Potential customers are provided with arguments to make informed decisions on the appropriateness of the developed technology for a specific product, depending on the specific requirements, economic constraints and environmental aspects. Other stakeholders (e.g. technology platforms, public authorities and funding bodies) can take the impact study results into consideration when drafting research programs or developing technology roadmaps, for example.
- To provide a tool for project monitoring and evaluation by the project consortium itself and report to the funding authority on the progress towards the project objectives and their associated expected impact. The impact study results in an iterative and adaptive process, which can be adjusted to the reality of the research results. It can also be adapted to take into consideration the evolution of other relevant technologies, normative or other issues appearing during the life-time of the project, which may influence in the project impact. The process should result in information and outputs which assists the consortium, if necessary, with problem solving and may consider the development of mitigation measures to avoid negative impacts, as well as the monitoring of their efficacy.

- To supply information of interest to communicate with the general public, providing arguments which justify the advantage and usability of the research results. The purpose is both to increase awareness and to demonstrate the benefit of the work funded with public funds (ultimately paid by the tax-payer).

Methods

General methodology

There is no standard methodology which can be universally applied to assess the impact of any science and technology research project. In the following, we propose an ad-hoc methodology which makes use of elements commonly applied to the different types of impact assessment discussed in the previous section. The methodology proposed pulls data from all appropriate sources and looks at all aspects of relevance. Its main process steps are described next:

1. Scoping – to identify the issues and impacts that are likely to be important and the level of detail required and to define the alternatives against which the project results will be compared.
2. Use of research and performance indices or indicators as the project evolves. The indicators are computed from the comparison between baseline data at a given point of time and baseline data previous to the project (initial baseline), in order to assess the degree of project progress resp. of achievement of goals. This information will be crucial to estimate the real technological impact of the results achieved. The specific data assigned to the indicators are calculated using the most appropriate method on a case-to-case base (e.g. laboratory testing of material samples, manufacturing chain simulation results on the base of a hypothetical scenario, nominal values for machine performance provided by the equipment manufacturers, etc.)
3. Collection of additional information from literature review, expert opinions, available databases, feedback from other project tasks (LCA, marketing) and other sources. This provides relevant background information and additional input data for establishing comparisons with other state-of-the-art technologies and for providing a holistic view.
4. Impact analysis – to identify and predict the likely effects of the project results in the technology, environment and economy, and to evaluate the importance of the findings. This analysis is done on the basis of the information retrieved and collected in the previous steps.
5. Mitigation and impact management (if applicable), proposing measures to prevent or minimize adverse impacts or any obstacles detected which could hinder the fulfillment of the expected impact.
6. Preparation of the report. Final conclusions are drawn and the main statements on the project impact are listed in the final report.

The techniques to be used in the second and third phase have been selected after evaluating different types of techniques applicable in impact studies. A complete list can be found in (Canter, Sadler 1997, p. 4-5) and includes, among others, case

studies, checklists, expert systems, indices or indicators, laboratory testing and scale models, literature review, matrices, monitoring, qualitative and quantitative models (conceptual), risk assessment, scenario building and trend extrapolation. In the following, we will introduce some of the methods and tools used for impact assessment, illustrating them with.

Indices or indicators and monitoring

Quantitative and qualitative indices or indicators can be used to measure the results and progress of a project as it evolves. In research projects, research and performance indicators may be defined in such a way as to enable an assessment of the degree of achievement of the impacts associated to the program objectives. For example, in the service contract “IEE Project Performance Indicators” (EACI/IEE/2011/001), impacts are defined as identifiable changes which demonstrate the extent to which the project activities have an effect on the target group, and can take place during its lifetime (specific or short term impacts) or beyond its lifetime (strategic or long term impacts). The use of performance indicators is recommended to determine the success of the project in reaching its objectives and creating energy related impact. In the case of this program (Intelligent Energy Europe), the Common Performance Indicators were defined as the sustainable energy investments triggered, renewable energy production, primary energy savings, and reduction of greenhouse gas emission (*Guidelines for the Calculation ...*, 2013, p. 4-5).

In other projects, research and performance indicators are stated in terms of percentage of reduction, degree of improvement, grade of enhancement, etc. of the actual values (measured at a specific point of time) of technology related baseline data in comparison with the initial baseline (baseline data at the beginning of the project or value known or estimated for state-of-the-art comparable processes). For example, the baseline data defined in the 3D-LightTrans project in order to provide measurable means to assess the work progress (Almansa 2016, p. 133-140) were stated in terms like processing time and yarn displacement, among others. The initial baseline (where the project work starts), and the corresponding value of baseline data to be determined at a specific point of time for assessing the progress in the project, were obtained from diverse measurement objects at the different stages of the project lifetime, namely:

- a) Different test pre-forms, during the development phase.
- b) Final demonstrations objects (a spare wheel well and a tailgate), during the demonstration phase.

Impact in the innovation capacity

From a broader perspective, research and innovation programs seek as ultimate impact not only the emergence of individual breakthroughs and innovations, but a global improvement of the innovation capacity, as a key to the promotion of economic and social development. A. López-Claros and Y.N. Mata have defined the Innovation Capacity Index (ICI), a tool for assessing the extent to which

nations have succeeded in developing a climate that will nourish the potential for innovation. Such an index is intended to allow policymakers and entrepreneurs around the world to examine the broad range of country-specific factors which underlie innovation capacity, creating a quantified framework for formulating and implementing better policies for the creation of an environment supportive of innovation (see *Figure 1* – below) (López-Claros, Mata 2010-2011).

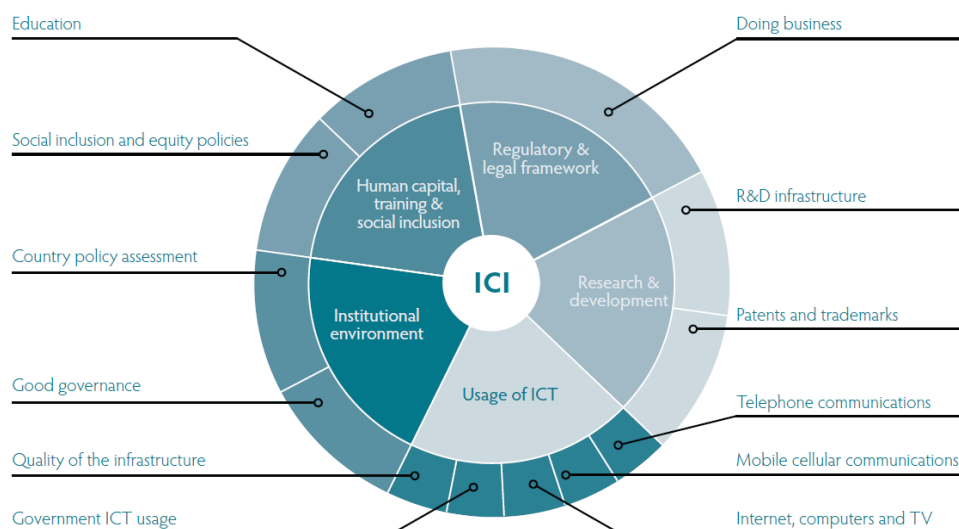


Figure 1. The innovation capacity index (A. López-Claros, Y.N. Mata)

Source: (López-Claros, Mata 2010-2011, p. 18)

Depending on the nature of the distinct types of research and innovation related project, different dimensions of the innovation capacity are more or less relevant. For example, research and training projects in the frame of publicly funded project address both Research & Development, on one hand, and Human capital, training & social inclusion, on the other. The impact assessment of the project must therefore address also the impact of the training activities in enhancing the human capital. In the long term, this is directly related to the competences acquired through training and to the professional path to be pursued by the persons trained. Such impact can be maximized by developing a research training program of “targeted competence building for efficient professional development in science and research”, an original concept proposed by the author of this paper which leans on example of the human resources information and management system developed for the competence assessment of Bulgaria’s workforce (<http://en.mycompetence.bg>).

Technological and impact

Large research collaborative project often do not only involve a unique technological or innovation result, but encompass a wide range of developments.

The aimed progress beyond the state of the art is normally defined in the project objectives. Nevertheless, the real technological impact of these developments depends actually on their potential to serve as a basis for enabling further developments. This can be easily illustrated in the case of the already mentioned 3D-LightTrans Project (<http://en.mycompetence.bg>; Almansa et al. 2014b) a large scale cooperation project which was awarded with the JEC Innovation Award 2015 (a top level innovation programme created in 1998 to reward outstanding companies and their cooperation partners for the excellence of their composite innovations) in the Reinforcements category. Within a project of 4 years duration, 18 scientific and industrial partners joined efforts to develop a manufacturing chain for low-cost high performance composites. The major impact of this project was directly related to the introduction of thermoplastic textile reinforced composites as a viable alternative for low-cost manufacturing of structural parts in the automotive sector (see *Figure 2* – below).

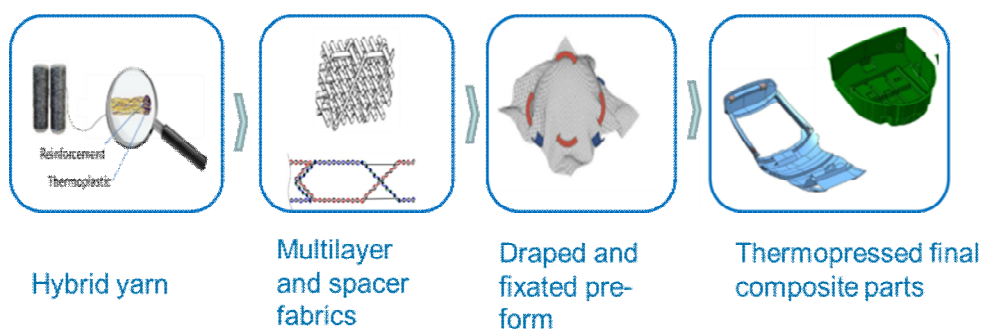


Figure 2. 3D-LightTrans innovative manufacturing concept for thermoplastic textile reinforced composites

Source: (Almansa et al. 2014a, p. 230-234)

However, although the main aim of this project was to develop a manufacturing chain for low-cost high-performance composites, the individual breakthroughs attained in several technologies led to significant progress and exploitation opportunities also in other applications going well beyond the originally foreseen manufacturing chain. For example, the main outcome of a work package specifically devoted to modeling and simulation was a comprehensive simulation toolbox covering in a holistic approach the whole manufacturing, process related, material and product simulation aspects of the textile reinforced thermoplastic composite technology developed. This result has a large potential impact in the up-scaling capability for industrial manufacturing. Indeed, this tool might be used as a basis for easing the redesign of the entire automotive supply chain with regards to materials, product design, and process design, which is a vital need and one of the major challenges which contribute to hinder the wide-spread introduction of composite materials in the automotive sector.

The project also delivered two modified weaving machines for producing 3D-shaped textile structures, creating an impact which goes well beyond the originally foreseen applications with the hybrid yarn (combining glass and plastic) developed in the project. This impact is clear from the fact that the breakthrough achieved (capability for industrial production of more complex weave architectures and thicker fabrics with a large degree of flexibility, keeping reduced fiber damage and guaranteeing highest quality final product quality) is theoretically not limited to its use with the hybrid yarn developed in the project. Similarly, the draping, fixation and consolidation processes developed in the project encompass a range of technological developments in the fields of robotics and material processing which have an impact on its own, as the knowledge generated can be further transferred to new processes and applications.

Life cycle analysis (LCA) and carbon footprint

Product environmental life cycle analysis (LCA) is used for identifying and measuring the impact on the environment of industrial products, including not only the effect on climate change, but also other impact categories, such as acidification potential and ozone depletion potential (*Carbon Footprint ...*, 2009, p. 1-2). This kind of EIAs consider the technological activities used for various stages of the product life: from the extraction of raw material for the product and for ancillary materials and equipment, through the production and use of the product, right up to the disposal (or recycling) of the product, the ancillary equipment and material. On the other hand, a Carbon Footprint – also called Carbon Profile – is an LCA with the analysis limited to carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions (e.g. methane, laughing gas, etc.) (Berners-Lee, Clark 2010).

In order to provide an insight into the implications of this type of study, we will illustrate it with a very basic and rough analysis for the specific case of the 3D-LightTrans project. Concerning the energy and carbon footprints, we will consider both the contribution to the footprint of both car manufacturing and car service. Using known data on industry emissions by sector, we reach for car manufacturing a footprint of 720 CO₂ per £1000 (around 17 Tons for a Ford Mondeo with medium specifications). Of this amount, 33% corresponds to metal extraction (for a Ford Mondeo with medium spec., 5,61 Tons). A second major contribution to the car manufacturing footprint is related to the gas and electricity used by the automobile industry itself, including all the component manufacturers as well as the assembly plant, and it accounts for 12% (around 2 Tons for a Ford Mondeo with medium spec) (*Carbon Footprint ...*, 2009). The 3D-LightTrans technology has some aspects that could decrease the manufacturing footprint of cars in several ways, e.g. by reducing the footprint associated to obtaining raw material, by using lower temperature processing (in comparison with metals) and avoiding the need for low temperature storage and transport of pre-forms (in comparison with thermoset composites). However, other contributions would add on in the energy consumption balance, like those of the fabric weaving and

automated draping. Therefore, the environmental impact considering only this aspect might not necessarily account positively.

However, the environmental impact of the project is also related to the abatement of CO₂ emissions through vehicle weight reduction, which is a key aspect justifying the large potential of composites in supporting long-term development of the automotive sector, according to (*Overview of the Worldwide ...*, 2011).

Using yearly average data for passenger vehicle (cars, minivans, pick-ups, vans and SUVs), we come to an average footprint of 0,1954 Kg CO₂/Km (*A Carbon Conundrum ...*, 2014). Assuming 100.000 Km/vehicle, this means 20 Tons CO₂ per vehicle during its entire lifetime. The reduction of the mass of a single structural component in 2 Kg. using 3D-LightTrans technology would mean, if we assume a linear relationship between CO₂ exhaustion and the vehicle's weight, a decrease of the order of 32 Kg. CO₂ per vehicle for its entire lifetime. If component is integrated in only one thousand part of the cars produced in a single year throughout the world, this could lead to a reduction of CO₂ emissions of between 1.000 and 2.000 Tons. Further, if the 3D-LightTrans technology is generalized and used for manufacturing other components, in the long term we could be speaking of an abatement of many thousands Tons CO₂.

Economic impact

Market studies and business cases are good tools to obtain an accurate analysis of the expected economic aspects. From a general point of view, in order to gather a comprehensive perspective, different perspectives need to be taken into consideration. In the case of the 3D-LightTrans project, this involved, for example, the issue of the material costs, manufacturing costs and added value.

Concerning material costs, if we consider the indicator price/strength, compared for different materials, we can conclude that glass/polymer materials composites constitute a very cheap option in comparison both with steel and with other light-weight solutions. However, the mechanical behavior of glass/polymer based composites is generally speaking worse, which restricts the range of potential applications of this material in transport. With the 3D-LightTrans technology, we achieve an improvement of the properties of the glass-thermoplastic composite which brings it to the level required by structural automotive components. In this way, our technology can comply with the needs of products which required till now the use of more expensive materials, in order to become lightweight. To provide an idea of the potential economic impact, we assume the price of a glass-carbon-epoxy composite could be reduced in 75% if it was produced in glass/PET using 3D-LightTrans technology. For an automotive component with a medium to large volume of parts manufactured per year, this could lead to annual savings in the order of magnitude of several millions.

Manufacturing costs play also a key role. Improved properties of glass/plastic composites can be achieved with different processes, from braiding or conventional weaving with autoclave to structural reaction injection molding (SRIM). However, the production costs and/or required investment are higher than with 3D-LightTrans.

The economic impact can also be related to the added value which the new technology brings. In the case of 3D-LightTrans, by enabling the manufacturing of more complex structures in one piece (e.g. by weaving thicker textiles instead of using sandwich structures with thin fabrics) the material properties can be significantly enhanced. The use of automation for draping will lead to higher repeatability and an increase in quality. Another example of added value is the potential to extend the functionality of the parts produced with the 3D-LightTrans technology, e.g. by integrating cabling or ventilation channels within parts made with spacer fabric. The increase in added value has also direct economic implications, since components can be sold with a larger profit margin and/or the number of customers can increase significantly.

Conclusions

In this work we have presented an ad-hoc methodology for assessing the impact of research and innovation related projects. We have also illustrated it by providing an insight into some of the results obtained within the project 3D-LightTrans, a research project devoted to the development of a manufacturing chain for low-cost, high performance automotive composite parts. The paper shows that the proposed methodology is appropriate for the different impact dimensions, including technological, environmental and economic impact.

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OCENA EFEKTÓW DUŻYCH PROJEKTÓW BADAWCZYCH

Streszczenie: Ocena rzeczywistych efektów w kontekście projektów badawczych stanowi duże wyzwanie z punktu widzenia zarządzania. Odpowiednie zarządzanie może pomóc w osiągnięciu celów, zwłaszcza w przypadku wspólnych projektów na dużą skalę. Otwarta pozostaje jednak kwestia, czy pierwotnie oczekiwane efekty zostaną osiągnięte. W niniejszym opracowaniu rozpatrzono sposoby radzenia sobie z tym problemem i wprowadzono metodologię oceny oddziaływania w projektach związanych z badaniami i innowacjami. Omówione metody zostały zilustrowane na przykładzie analizy oddziaływania przeprowadzonej w projekcie 3D-LightTrans.

Słowa kluczowe: wpływ, badania naukowe, innowacje



THE POTENTIAL OF ACADEMIC ENTREPRENEURSHIP IN UNIVERSITIES OF VISEGRAD GROUP COUNTRIES

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Abstract: The paper presents selected results of the survey on academic entrepreneurship which was carried out within the Visegrad Fund Project in four universities in member states between October 2016 and February 2017. The results reveal the level of entrepreneurship's awareness among university employees and students as well as their attitudes towards entrepreneurial activities. The paper also examines the principle incentives and barriers of setting up the business in Visegrad Group (V4) countries. It also discusses the perception of business attractiveness of Visegrad Group countries among surveyed university employees and students. The first part of the paper is dedicated to the theoretical background of the work which includes the concepts of academic entrepreneurship and business attractiveness as well as the macroeconomic environment of the Visegrad Group countries. The second part presents the brief description of the Project, methodology, goals and major assumption of the Project as well as some of the detailed results obtained. The paper ends with brief conclusions.

Keywords: academic entrepreneurship, business environment, Visegrad Group

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Academic entrepreneurship and business environment – introductory remarks

The academic entrepreneurship is a relatively new concept in the management science. The so – called entrepreneurial university was described for the first time in 1983 by Etzkowitz in the discussion on the application of American academic science in commercial environment (Etzkowitz 1983, p. 198-233). Since then, the concept has been developing in various countries and is now a significant part of a modern economy (Bąk 2016).

The question of academic entrepreneurship is focused primarily on the economic and social dimensions of this phenomenon (Holienka 2014, p. 41-50). It is believed to play major role in resolving the problem of unemployment but it also contributes to creation of other jobs (Skowron-Grabowska, Mesjasz-Lech 2016, p. 22-28). The academic entrepreneurship however apart from typical features of entrepreneurship involves additional and distinctive element. It is essentially correlated with university employees and students. One of the simplest definitions of academic entrepreneurship can be expressed in the following way. It is a situation in which a university scientist, most often a professor, sometimes a PhD student or a post-doc researcher, sets up a business company in order to commercialize the results of the research. It is also the potential definition of the

classical entrepreneurship enriched with the qualifying adjective “academic”, which stresses that the findings and innovations introduced by the entrepreneur originate from the research conducted at university (Franzoni, Lissoni 2006, p. 2). The concept of the academic entrepreneurship can also be defined as the process in which an individual or group of individuals linked through their work to a university or research center use knowledge created in their research to set up business ventures (Miranda, Chamorro-Mera, Rubio 2017, p. 113-122). The above presented approaches understand academic entrepreneurship as a specific type of entrepreneurship. They strongly relate academic entrepreneurship to the process of transfer of knowledge and technology and its commercialization in the formalized way. The transfer may include: creation of spin – off companies, spin – on companies, licensing, selling technology etc. The academic entrepreneurship may also be approached in a different and more broader way. The term of the “academic based entrepreneurship” is adequate here. It includes all enterprises created by the academics and students and not only the ones which are based on exploitation of technology created at university (Osiri et al. 2014, p. 39-61). This in turn refers to all possible entrepreneurial actions which can result in any financial reward. This category is much wider and includes much more activities which are not in scope of typical transfer of technology (Bąk 2016, p. 45).

Those more informal methods may be more frequent for some science fields like: humanities, social sciences – where technology transfer is usually not the case (Abreu, Grinevich 2014, p. 408-422). The broader approach may also include any entrepreneurial activities performed by the university employees and students which are not directly linked to their scientific background (Daroń, Wójcik-Mazur 2014, p. 31-43). Such a broad and general approach was the object of the research which allowed to examine the entrepreneurial attitudes of university employees and students as well as their experience in this regard. It also allowed to determine the motives, incentives and barriers for running a business as perceived by the surveyed academics and students. The other term which also requires to be explained is the business attractiveness which was the object of the research too (Pabian 2015, p. 7-16). More specifically the research was to reveal the business attractiveness of Visegrad Group countries. Business attractiveness itself can be considered as a significant factor which affects the competitiveness of the country or region (Kadłubek, Krzywda, Krzywda 2017, p. 68-81). The assessment of business environment which then affects its attractiveness for potential entrepreneurs is subject to numerous analysis carried out by many national as well as internationally accepted institutions, which results have usually the form of composite indices reflecting the quality of the business environment (Bruothova, Hurny 2016).

The aim of the research was to investigate the perception of business attractiveness of individual member states of Visegrad Group by the academics and students who come from these countries. The perception of business attractiveness of the own country as well as neighboring countries by the academics and students plays significant role in creation of entrepreneurial attitudes and development of start - ups established in cross – border environment (Kościelniak 2016, p. 65-73).

Visegrad Group countries are an excellent example of the cross - border cooperation which might also include the cross – border entrepreneurship.

The concept of business environment which influences the perception of attractiveness of a given market can be defined as a set of economic, legal and institutional conditions which affect the entrepreneurs' behavior in positive or negative way, but usually cannot be controlled by them. Business environment may also be explained as business conditions which promote or hinder the creation and development of enterprises (Demjanová 2009, p. 58-66). The importance of a well-functioning legal and regulatory system in creating an effective market economy is now widely accepted (Łęgowik-Świącik, Kowalska, Turek 2016, p. 46-55). Poor contracting and regulatory environment can raise the cost of doing business with knock-on effects to employment, output, investment, productivity, and living standards (Besley 2015, p. 99-120). It is also worth noting that the barriers to doing business vary across regions and countries (Ślusarczyk 2016, p. 7-22).

The business environment is an essential element for the development of the enterprises. A favorable business conditions are important prerequisite for long-term competitiveness and growth of any market economy (Kočišova, Tartal'ová 2010, p. 17-33). It's an environment in which the authorities encourage and protect competition, create clear and stable rules, effectively ensure compliance for all market participants, minimizing administrative burdens and requirements to entrepreneurs. Small and medium-sized enterprises play a significant and essential role in all countries with a market economy. They also have extraordinary significance in the development of the economy in Visegrad Group countries for creating new jobs and in regional development. However, micro and small enterprises which might be the subject to academic entrepreneurship are very sensitive to the quality of the business environment.

Macroeconomic environment of the Visegrad Group countries

Macroeconomic environment is the general background in which all organizations operate. It consist of political, economic, social, technological, legal and eco-environmental spheres. The organization cannot control factors trends within these spheres, and it is usually not able to influence them. The situation in which organizations are able to influence macroeconomic factors, take place when the political parties and governments are lobbied by them (ScienceDirect 2009).

The analysis of organization environment has significant role in process of preparation before taking decisions and action. Decisions will be better on every level of organization, if responsible person will understand how organization works in its environment and how field of his work fits into environment. By this understanding, the number of more informed decision will increase. Decision should base on business awareness. Making plans for uncertain future is easier and more effective after analysis of the organization and the major factors which are likely to impact on performance. People on every level in the organization, should be involved because strategy falls to all parts of an organization. To analyze the

business environment, the variety of environmental analysis tools may be used as for example balanced scorecard, BCG analysis, market research, Ansoff's matrix.

In order to foster the involvement in entrepreneurship, policy makers need to understand the factors leading young individuals towards enterprising efforts (Holienka 2014, p. 49). The above mentioned factors constitute both advantages and disadvantages of setting up a business. Apart from economic and legal circumstances the personal attitudes and motives also need to be taken into account.

The above mentioned macroeconomic factors play significant role in perception of the quality of business environment of a given country. The business environment thus reflects the economic conditions of a state (Buno, Nadanyiovaa, Hraskova 2015, p. 423-430). It creates one of the fundamental motivation for running a business and basic conditions for the development of micro, small and medium-sized enterprises. Quality business environment is one of the ways of sustainable economic growth therefore the governments of V4 countries should create the business environment (conditions) that will promote investment, job creation and increased productivity. The overall conditions for running a business have serious impact on the overall entrepreneurial attitudes and are reflected by the entrepreneurial behaviors of academic employees and students who were surveyed in the following research investigations.

Selected results of conducted research – perceiving of academic entrepreneurship by academics and students

Information about project

Four partner universities: University of Bielsko-Biala, Technical University in Ostrava, Alexander Dubček University in Trenčín and Szent István University, representing Poland, Czech Republic, Slovakia and Hungary carried out the project: Cross-border Bees in V4 Countries - Building of Educational Entrepreneurship Start-ups in V4 Group, covered by the Visegrad Fund. The project lasted five months (October 2016 – February 2017). It had scientific-educational character and was dedicated to students and employees of partner and other universities as well. The project gathered the representatives of business too. Within the project, scientific conference relating to Academic Entrepreneurship in International Context and workshops for students, concerning creating new business ideas in Visegrad environment were organized. The project gave the attended a possibility to exchange innovative ideas and experience in the scope of cross-border economy. Thanks to team work, students created new opportunities for setting up their own businesses, supported each other in being innovative and above all developed their passion. This passion should transfer ideas into real companies in the future.

Research methodology

Methodology of the project presents *Table 1*.

Table 1. Research methodology

Research method	Questionnaire survey
Purpose	Analysis and assessment of the potential of academic entrepreneurship in selected universities, representing the Visegrad countries.
Research problems	<ol style="list-style-type: none"> 1. Do students and employees have an experience of working in business? 2. What factors decide that people start to run own business? 3. What barriers stop running own business? 4. Is the Visegrad environment attractive place for running a business? 5. Which cross-border economic activities have the biggest chance to succeed?
Research tool	Questionnaire (10 questions + metrics; used closed and open questions and different scales).
Interviewees	Students (400 people) and employees (200 people) of partner universities. Total population 600 interviewees. Selection of examined population was done at random in each university.

Source: Own elaboration

Results of the research

Results of conducted research are presented in figures from 1 to 20. Figures relate to formulated research problems, analyzing them in perception of employees and students of examined universities. Below, authors expressed comments relating to research results.

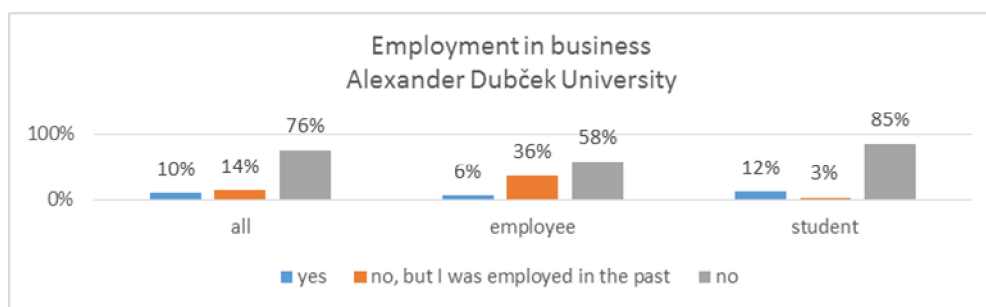


Figure 1. Employment in business in Alexander Dubček University

Source: Own elaboration

Figures from 1 to 4 concern experience of the interviewees of working in business. General results of three universities concentrate around 30%. The smallest experience in business represents the interviewees of Alexander Dubček University. All achieved results in this question are relatively low. Experience in business is important factor for both academics and students. Academics possessing experience in business can connect theory and practice during working at university. Experienced students are perceived better by potential employers on the market.

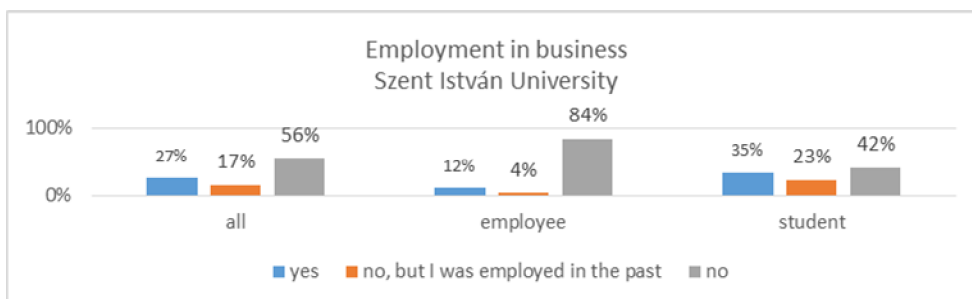


Figure 2. Employment in business in Szent István University

Source: Own elaboration

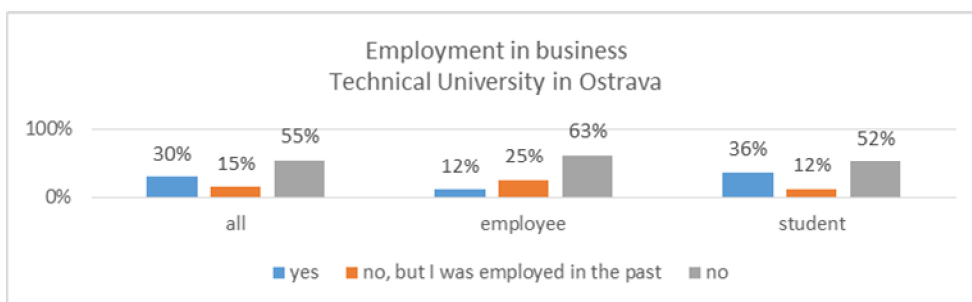


Figure 3. Employment in business in Technical University in Ostrava

Source: Own elaboration

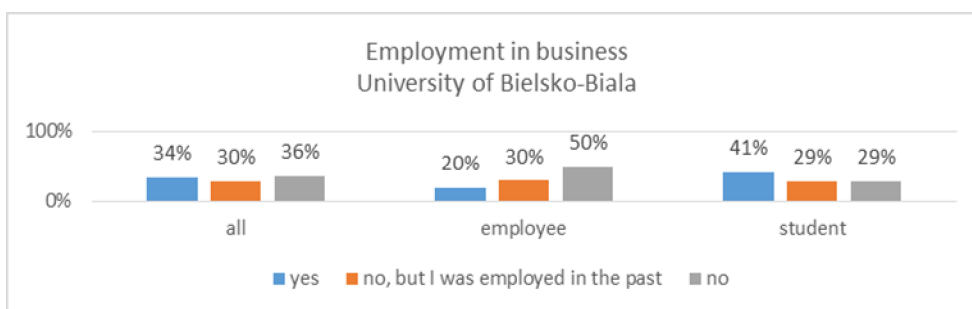


Figure 4. Employment in business in University of Bielsko-Biala

Source: Own elaboration

Next group of figures, from 5 to 8, concerns possession of own business by employees and students of analyzed universities. Positive answers for this question are again relatively low. This time, the biggest score achieved the interviewees of Szent István University. Twenty percent of them possess own business. Lack of experience in business can be a consequence of not running own business by the representatives of surveyed universities.

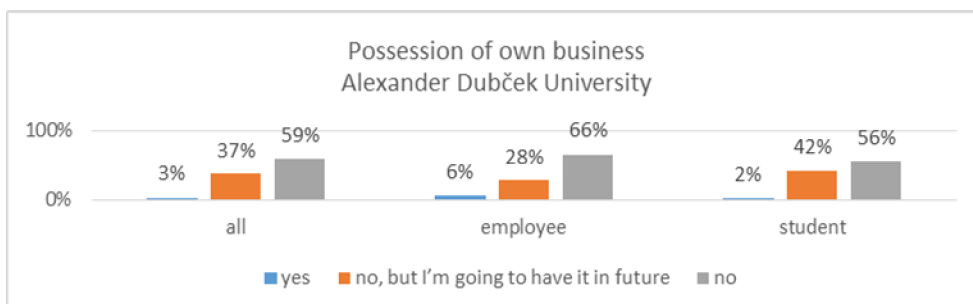


Figure 5. Possession of own business in Alexander Dubček University

Source: Own elaboration

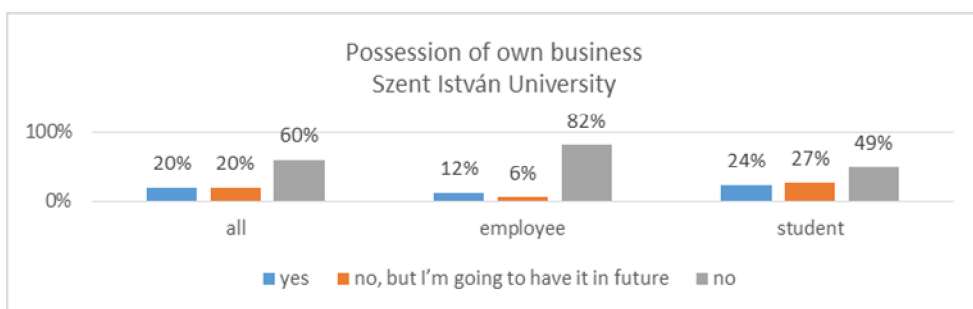


Figure 6. Possession of own business in Szent István University

Source: Own elaboration

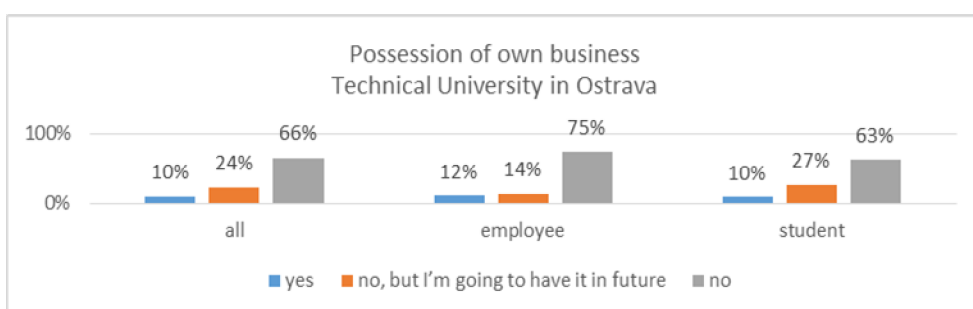


Figure 7. Possession of own business in Technical University in Ostrava

Source: Own elaboration

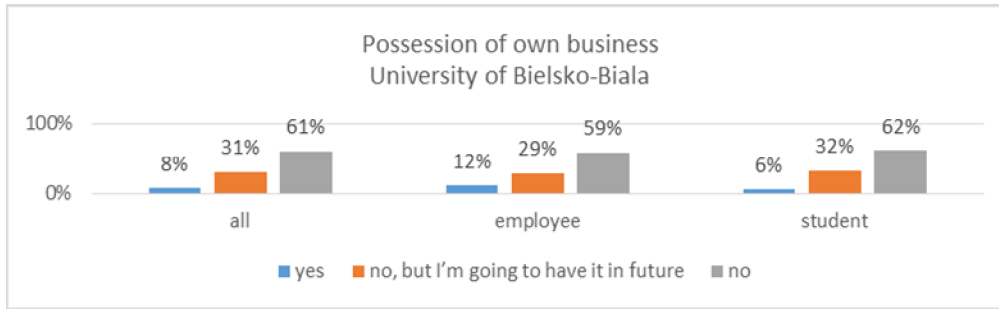


Figure 8. Possession of own business in University of Bielsko-Biala

Source: Own elaboration

Two next questions were dedicated to the interviewees who answered positively in the previous question. They concerned determinants deciding to start own business and main obstacles of running own business. Results are interesting and presented on the figures from 9 to 16. When it comes to Alexander Dubček University, the representatives of it marked following three main determinants as important to run own business: flexible working hours, a need to have own business and support from the business environment institutions.

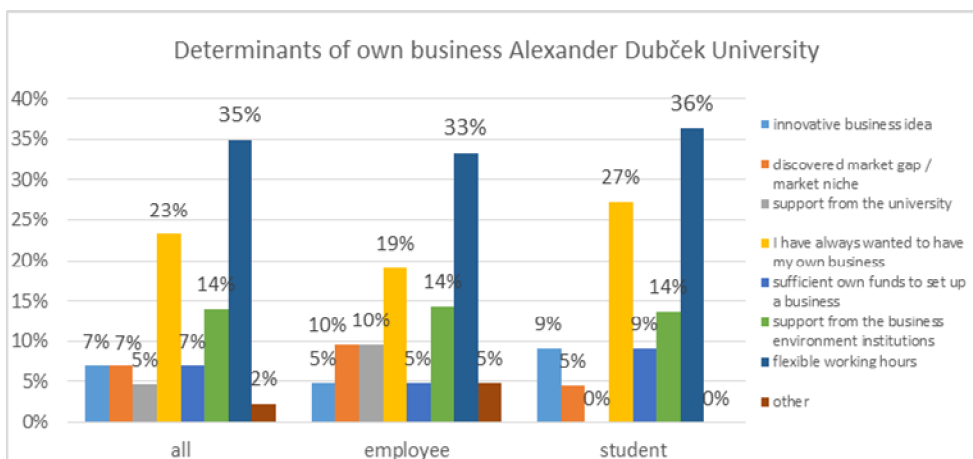


Figure 9. Determinants of own business in Alexander Dubček University

Source: Own elaboration

In case of Szent István University main determinants of own business are: flexible working hours, existing of market niche and a need to run own business. Looking at answers of employees of this university, very important factor for them determining own business is discovered market gap.

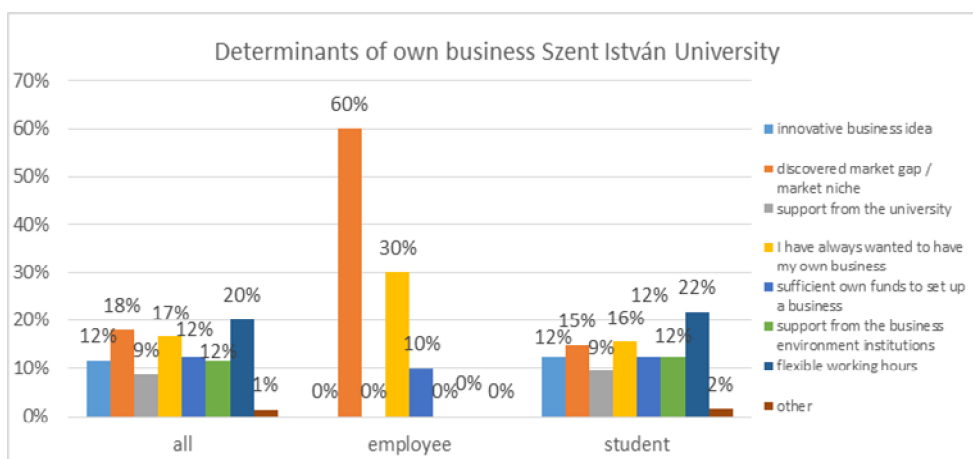


Figure 10. Determinants of own business in Szent István University

Source: Own elaboration

Employees and students of Technical University in Ostrava asked about determinants of running own business replied: a need to possess own business, existing of market gap and innovative business idea being starting point to set up a business.

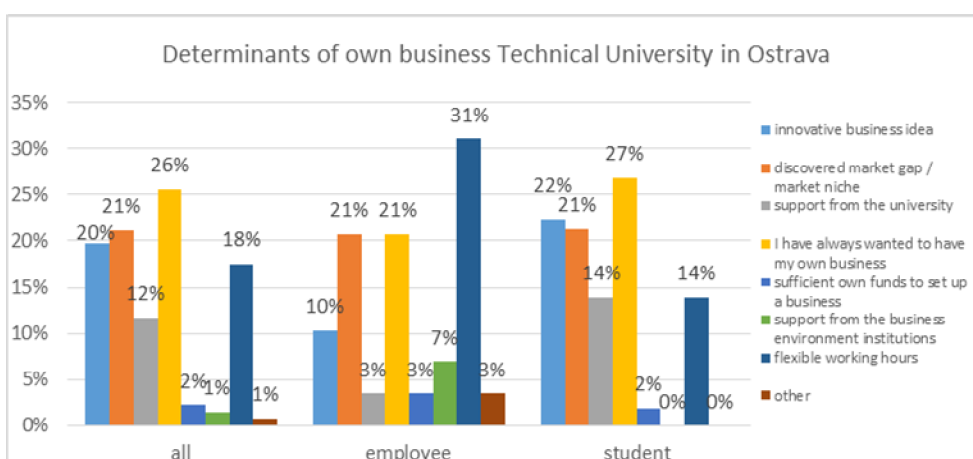


Figure 11. Determinants of own business in Technical University in Ostrava

Source: Own elaboration

Results relating to University of Bielsko-Biala are as follows: flexible working hours, a need to possess own business and innovative business idea. Results concerning employees and students are very similar in case of this university.

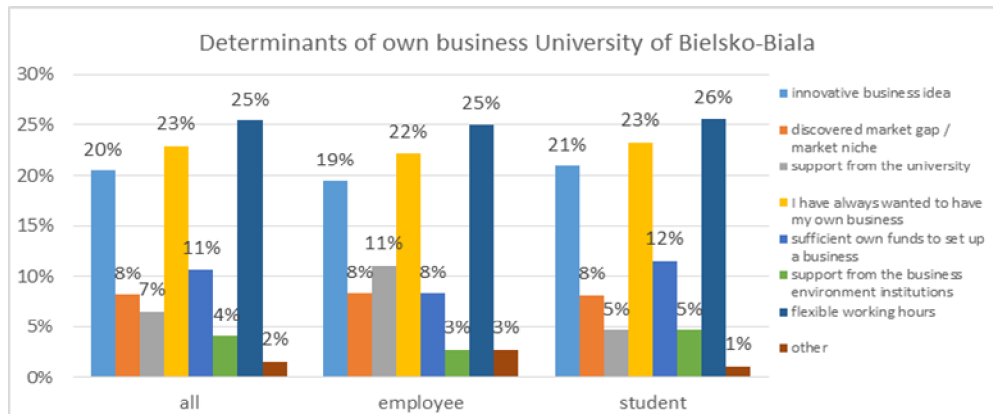


Figure 12. Determinants of own business in University of Bielsko-Biala

Source: Own elaboration

As mentioned above, next four figures present information gathered during research, relating to barriers of running business in perception of employees and students of examined universities.

According to the representatives of Alexander Dubček University main barriers of running a business are: lack of funds for beginning capital, extended bureaucracy when it comes to set up own business and high risk of running a business.

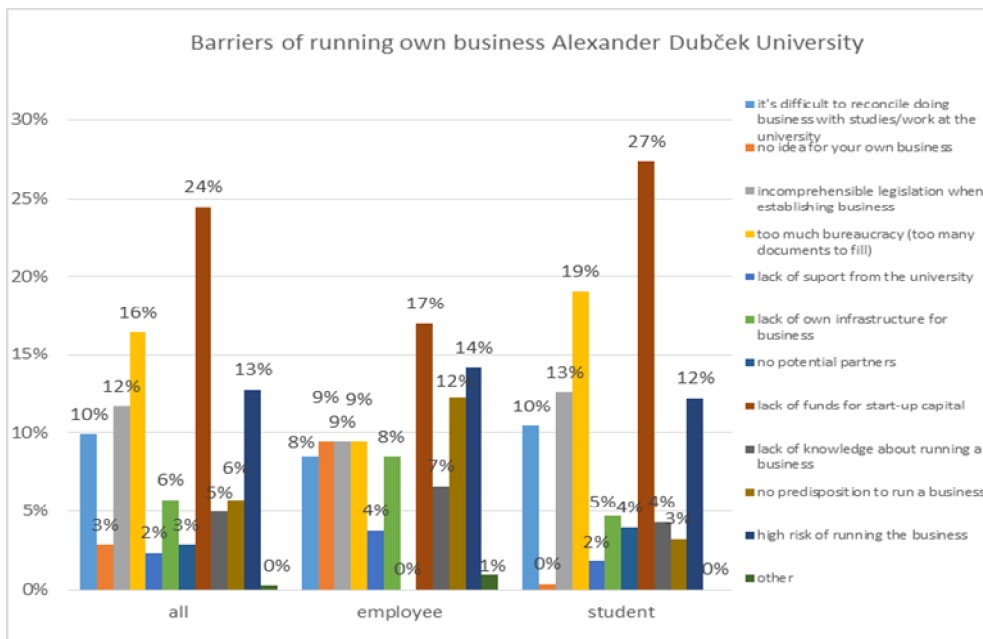


Figure 13. Barriers of running business in Alexander Dubček University

Source: Own elaboration

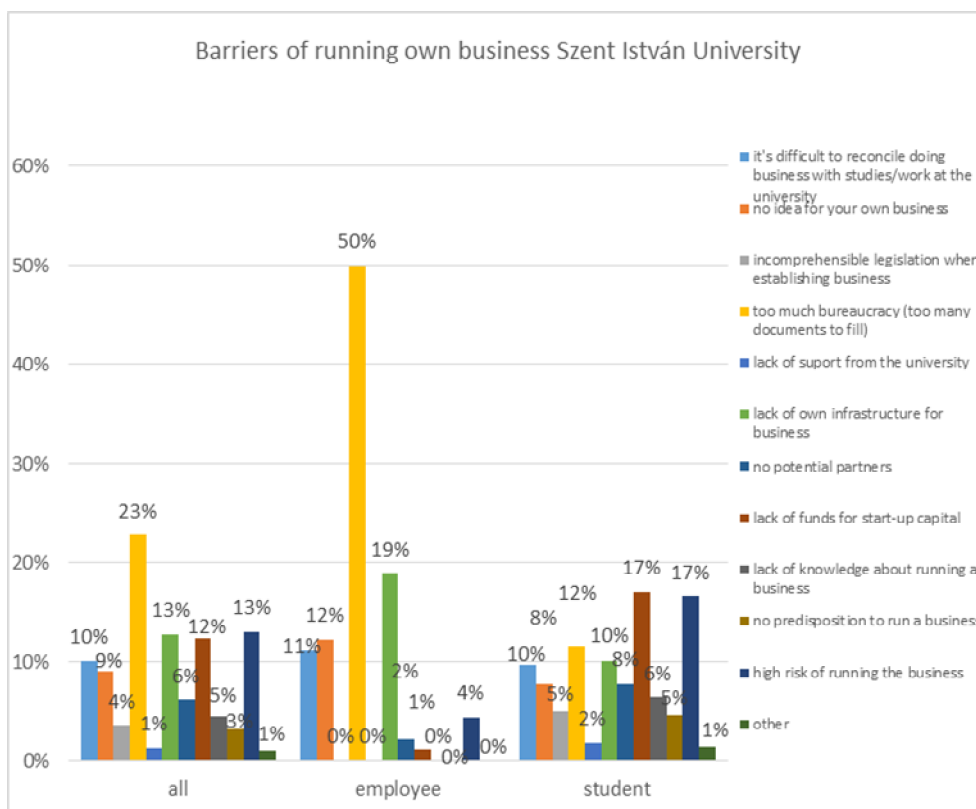


Figure 14. Barriers of running business in Szent István University

Source: Own elaboration

Employees and students of Szent István University pointed out following obstacles to start own business: too much bureaucracy, high risk of running own business and lack of own infrastructure for a business.

No idea for own business, high risk of running own business and difficulty to reconcile doing business with working/studying at university were main barriers marked by the interviewees of Technical University in Ostrava.

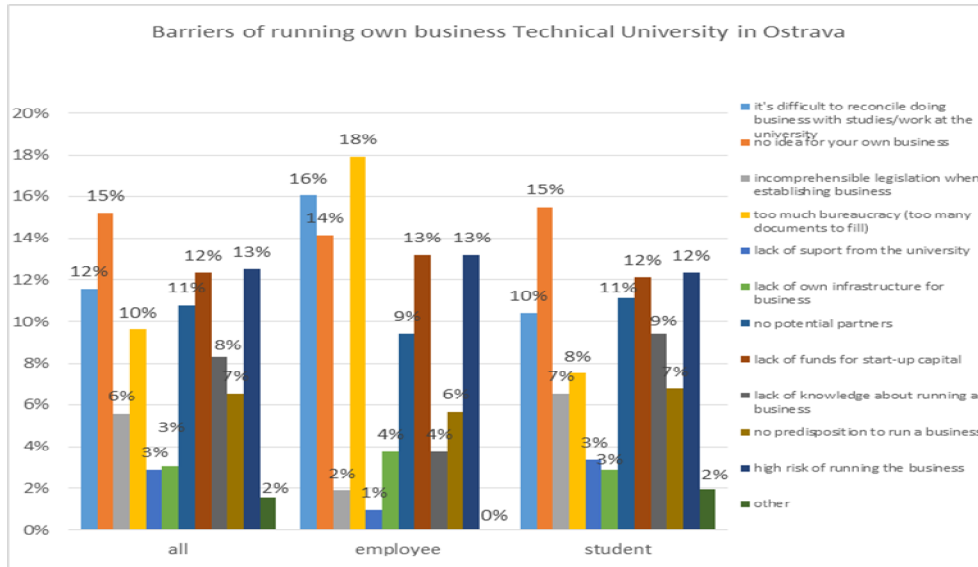


Figure 15. Barriers of running business in Technical University in Ostrava

Source: Own elaboration

For the representatives of University of Bielsko-Biala main barriers of running a business were: lack of funds for start-up capital, high risk of running own business and no idea for own business.

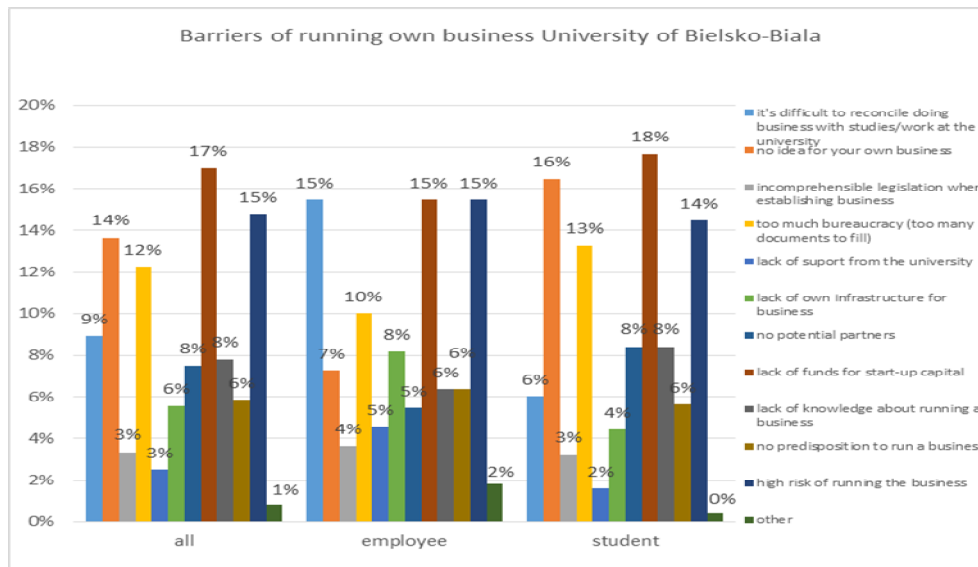


Figure 16. Barriers of running business in University of Bielsko-Biala

Source: Own elaboration

Figures from 17 to 20 present assessment of attractiveness of Visegrad countries for running a business. The interviewees used six degrees scale.

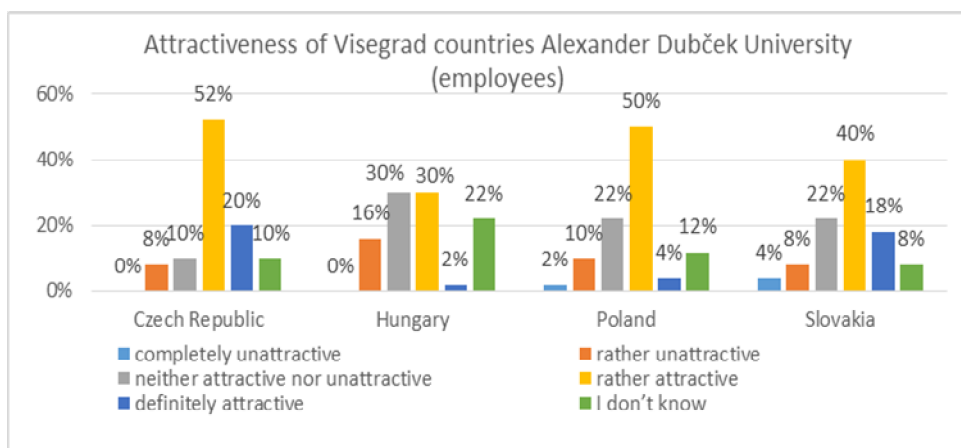


Figure 17. Attractiveness of V4 countries in perception of employees in Alexander Dubček University

Source: Own elaboration

Results are following, employees of Alexander Dubček University consider Czech Republic as the most attractive place for running a business. Students of this university answered the same way.

In case of Szent István University, employees and students consider their country as the most attractive.

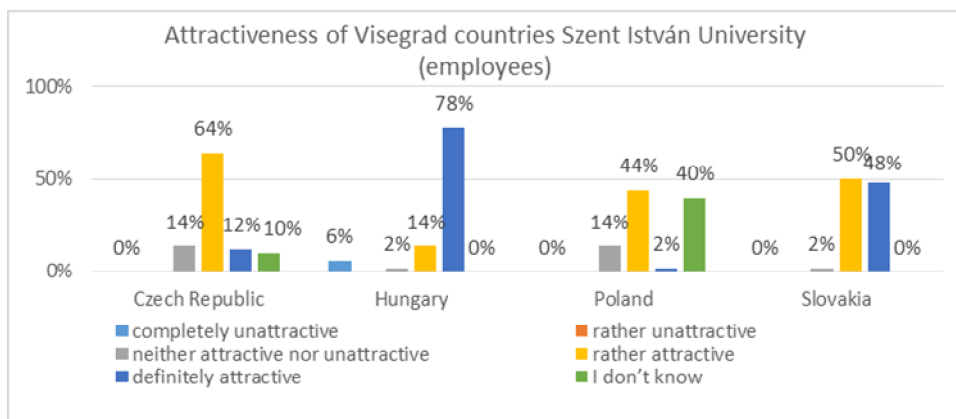


Figure 18. Attractiveness of V4 countries in perception of employees in Szent István University

Source: Own elaboration

The same situation concerns the interviewees of Technical University in Ostrava. They assessed their country as definitely attractive place for running a business.

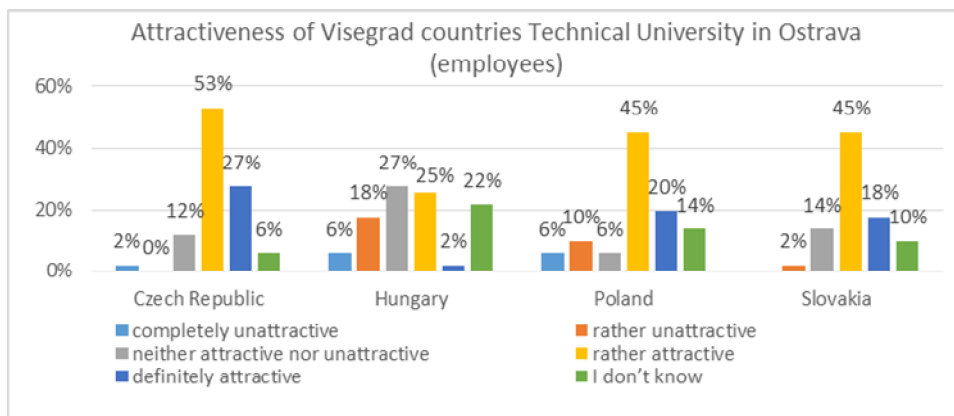


Figure 19. Attractiveness of V4 countries in perception of employees in Technical University in Ostrava

Source: Own elaboration

When it comes to University of Bielsko-Biala, situation is similar, but in case of employees. According to them, Poland is the most attractive place for running a business. Students of University of Bielsko-Biala considered differently. They marked Czech Republic the most often.

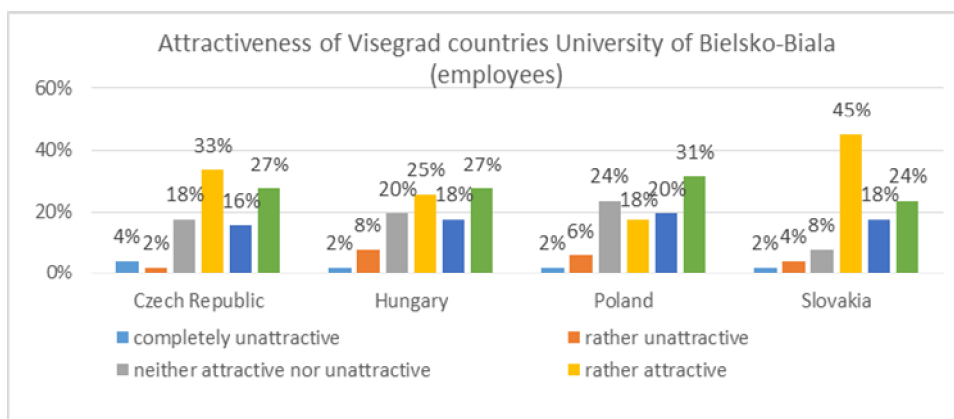


Figure 20. Attractiveness of V4 countries in perception of employees in University of Bielsko-Biala

Source: Own elaboration

Last question related to assessment of economic activities, which have the biggest chance to succeed in case of cross-border businesses.

General answers, according to all universities, are as follows:

- Tourism,
- Trade,
- IT services,
- Educational services,
- Transport and logistics services.

Conclusions

Conducted research leads to merit conclusions, concerning defined research problems. Based on population engaged in the research, conclusion relating to an experience of working in business can be expressed. Employees and students of all examined universities have small experience of working in business. They concentrate on working and studying at universities. But, in case of proper cooperation with companies, such experience is important for both academics and students. Similar situation concerns running own business by the questioned. Only a few percent of them run own business. This information should put stronger emphasis on development of academic entrepreneurship. Authorities of universities ought to create good conditions to its growth.

Further part of the questionnaire survey concerned factors determining running own business. Voice in this case took the interviewees who marked running a business in the previous part of the research. The representatives pointed out following determinants: flexible working hours, a need to have own business, support from the business environment institutions, possessing of funds to start own business, existing of market niche and innovative business idea being starting point to set up a business. The same group of the interviewees defined following barriers of running own business: lack of funds for beginning capital, extended bureaucracy when it comes to set up own business, high risk of running a business, lack of own infrastructure for a business, no idea for own business and difficulty to reconcile doing business with working/studying at university.

Each of Visegrad country is an attractive place for running a business, but of course, this is determined by many micro and macroeconomic factors and by advantages and disadvantages of each economy. Answers for the question relating to attractiveness of Visegrad countries for running a business should be analyzed together with special indicators.

The last discussed area in the research concerns cross-border economic activities, which have the biggest chance to succeed, in case of running a business. Employees and students featured following economic activities: tourism, trade, IT services, educational services and transport and logistics services.

Summary

Academic entrepreneurship plays and will play an important role in steering of national economies of Visegrad countries. According to theoretical and practical part of following article, academic entrepreneurship means promotion in academic environment entrepreneurial behaviors among employees and students, who develop their own businesses and become young entrepreneurs. Academic entrepreneurship is relevant area of activity of modern university, as a subject creating knowledge and new technologies for the economy. Following factors can stimulate development of academic entrepreneurship at universities (Jakubiec, Kurowska-Pysz 2013, p. 59):

1. Proper infrastructure: career office, academic incubator, center of technology transfer.
2. Motivating of academics and students to intellectual growth, improving quality of knowledge at university.
3. Development of research and lab infrastructure and intensification of cooperation with external units, like scientific-technological parks, other universities, clusters.
4. Creating of law and organizational conditions for employees and students to engage in business.
5. Effectiveness of university in applying for external funds.
6. Economy's demand for knowledge, basic product of university.

In the paper there were presented selected results of the survey on academic entrepreneurship which was carried out within the Visegrad Fund Project in four universities in member states between October 2016 and February 2017. The results reveal the level of entrepreneurship's awareness among university employees and students as well as their attitudes towards entrepreneurial activities. The paper also examines the principle incentives and barriers of setting up the business in Visegrad Group (V4) countries. It also discusses the perception of business attractiveness of Visegrad Group countries among surveyed university employees and students.

Review of literature and results of research let achieved the purpose of the paper and analyzed and assessed the potential of academic entrepreneurship in selected universities, representing the Visegrad countries.

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POTENCJAŁ PRZEDSIĘBIORCZOŚCI AKADEMICKIEJ W UNIwersYTETACH KRAJÓW GRUPY WYSZEHRADZKIEJ

Streszczenie: W artykule przedstawiono wybrane wyniki badań przedsiębiorczości akademickiej, które przeprowadzono w ramach projektu finansowanego przez Fundusz Wyszehradzki w czterech uniwersytetach w państwach członkowskich, w okresie od października 2016 r. do lutego 2017 r. Wyniki przedstawiają poziom świadomości przedsiębiorczości wśród pracowników i studentów uczelni, a także ich postawy wobec działań związanych z przedsiębiorczością. W artykule przeanalizowano również główne aspekty zakładania i prowadzenia działalności gospodarczej w krajach Grupy Wyszehradzkiej (V4). Omówiono także postrzeganie atrakcyjności biznesowej krajów Grupy Wyszehradzkiej wśród ankietowanych pracowników i studentów uczelni. Pierwszą część artykułu poświęcono teoretycznemu kontekstowi pracy, który obejmuje koncepcje przedsiębiorczości akademickiej i atrakcyjności biznesowej, a także otoczenia makroekonomicznego krajów Grupy Wyszehradzkiej. Druga część zawiera opis projektu, metodologię, cele i główne założenia projektu, a także niektóre z uzyskanych szczegółowych wyników. Artykuł kończy się krótkimi wnioskami.

Słowa kluczowe: przedsiębiorczość akademicka, otoczenie biznesu, Grupa Wyszehradzka



EXTERNAL CONDITIONS AND IMPLEMENTATION OF THE LEAN MANAGEMENT CONCEPT IN THE ENTERPRISE

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Abstract: Lean Management is one of the most popular management concepts today. Its popularity is increasing due to ever higher performance indicators of its organization. Thus, more and more companies are implementing Lean Management's vision of operational excellence as an effort to implement this concept. The concept is particularly popular among automotive companies, where they come from. The purpose of this article is to identify and characterize the external circumstances of implementing the Lean Management concept. In addition, as part of the empirical research, an attempt was made to determine the impact of individual, previously identified external conditions on success in implementing the Lean Management concept. Completed with conclusions.

Keywords: external conditions, Lean Management concept, implementation

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Introduction

Implementing organizational changes that take the form of, among other things, the implementation of new management concepts often fails because there is no systemic model for implementing these concepts. The implementation of a management concept in addition to the systematic, phased implementation process should also entail the conditions accompanying the implementation of subsequent stages. It should be noted that there is a wide spectrum of factors determining the success of Lean Management. These factors are systemized according to different categories, most often in terms of external and internal determinants. The most commonly considered factors in the scientific knowledge as those that determine the process of Lean Management are the following:

- the capital of an enterprise,
- level of knowledge, education and creativity of human resources,
- ability to implement the latest technology and information systems,
- attractiveness of the market sector,
- the number of competitors in the sector,
- the ability to produce rare and highly qualified services and products,
- skillful and efficient management of staff resources,
- ability to solve conflicts,

- effective promotion and advertising of products, services,
- many distributors in the sector,
- high level of profitability of the company.

The objectives of this paper are: identification of external conditions that determine both the initiation of actions aimed at implementation of the Lean Management concept and the effectiveness of its implementation. Then, based on the empirical research, an attempt will be made to answer the question: Which of the identified factors are particularly relevant in the context of the production staff and which for the managers?

The essence and assumptions of the Lean Management concept

The Lean concept is an improvement of the processes under the Deming concept, which the Japanese managers have worked on for the PCDA cycle, so that it can be applied at all stages of management and in all situations (Imai 2007, p. 86). The concept of wasting and the fight against wasting are in the home literature of the subject, which manifests itself in the elimination of all activities which entail labor costs which bring no value (Matwiejczuk 2009, p. 59). The sources of wasting are the widespread non-productive losses (Liker, Meier 2011, p. 87-93):

- production of products not ordered by the customer, which results in an increase of stocks of finished products,
- the idle time of machines and people on deliveries that are delayed or the next steps in the process, which are caused by bad organization of work,
- unnecessary transport of materials between the areas of operation, which refers to the unnecessary movement of machinery as well as the movement of goods and raw materials,
- excessive time to perform specific operations due to poorly designed tools and products, rapid hardware wear, failure, contamination, defects in quality,
- excessive stockpiles that freeze money for the purchase of packaging or raw materials, they increase the risk of damage and hinder the quality control of stored products,
- moving workers to find parts, manuals, tools or assistance refers to poor work organization and poorly designed workstations,
- errors or mistakes that require correction or repair referred to the cost of scrapping faulty products, manufacturing disruptions, and time consuming complaints.

Consequently, wastes in every enterprise manifests the following phenomena: excess inventory, redundant movements, unnecessary transport, waiting, overproduction, errors in the process, and production failures and errors.

Identification of external conditions when implementing Lean Management

It is well known that the environment influences the shape and the strength and direction of the activities of all the elements that exist in it. In other words, the

environment is conditioned by the circumstances that affect all the businesses in it (<https://sjp.pwn.pl/sjp/...>). These conditions can be beneficial and represent a kind of opportunity, or disadvantage and take the form of barriers or even threats. If we are talking about conditioning (or conditions – the most commonly used synonym), it should be emphasized that these conditions forcefully affect the existing in their zone of influence of the individual becoming sometimes necessary requirements (<https://sjp.pwn.pl/szukaj/...>).

Identification of macro-economic areas and their impact on businesses are an important topic in both Polish and foreign scientific management, especially strategic (Ślusarczyk 2016, p. 12). Authors taking up the above issues can be represented primarily by M. Romanowska, G. Gierszewska, J. Lichtarski, Z. Pierścionek, M. Moszkowicz, A. Stabryła and R. Krupski. M. Romanowska and G. Gierszewska claim that the environment creates unequal conditions depending on the region, industry, sector, size of the enterprise and the form of their ownership (Gierszewska, Romanowska 2002, p. 38). The situation of the company is influenced by many different factors from the environment and their influence overlap each other by creating interactions. When implementing Lean Management as in the case of enterprise strategy development, full analysis of macro-factors is neither feasible nor necessary. It is up to you to have the experience and knowledge of the current macro-level to select the most important influences and only limit the analysis to them (Pierścionek 2011, p. 107).

The environment used to be divided into distant - macroeconomic and a closer environment also referred to as a competitive or microeconomic. Changes in the larger, distant environment affect the operation of the company, while the company has no influence on them, an example may be demographic changes, legal regulations or the political situation (Kozmiński, Piotrowski 1996, p. 76). The situation is different in the case of a closer environment. There is interaction between the closer environment and the enterprise, they can change and shape each other. Typical elements from the nearer environment are the recipients, competitors or suppliers (Obłój 2007, p. 208).

Macroenvironment factors can be assigned to several areas: political, legal, economic, technical and technological, demographic, social and international. Each of the above-mentioned areas affects the company's legal form, ownership structure, technologies used, resources and sources, processes, production and IT technologies used, and the direction and dynamics of changes undertaken, including organizational changes aimed at implementing new ones. management concepts (Seroka-Stolka et al. 2017, p. 128).

According to Skonieczny, the macro-environment factors that significantly determine the activities undertaken in the company should be considered first of all: state policy and legislative acts aimed at creating favorable conditions for operations made by international corporations in Poland (Skonieczny 2005, p. 225-230). These entities, apart from capital, bring organizational practices within the framework of applied management concepts together with tools. Therefore, it can be concluded that the area of Poland is provided with the knowledge and practice of the Lean concept implemented with foreign capital. The production

facilities of international corporations opened in our country are characterized by top-down organizational practices and applied management concepts (Brzóska, Jelonek 2015, p. 52). Most often, the new plant is opened with the help and co-operation of existing employees of corporations delegated from already operating foreign production plants. This solution facilitates and accelerates the implementation of the Lean concept. In addition to specific behavior patterns from industrial entities, other factors of the close environment, which include emerging behavioral standards in a given region, have a significant impact on the enterprise, and even a certain local inclination to take the risk related to introducing organizational changes (Florida 2010, p. 250-267). The amount of subsidies and grants for businesses, inflation and demographic issues are also important, such as the scale of unemployment or the level of education of the population (Sopińska, Wachowiak 2016, p. 21-22). In turn, Czupich in his research identified the factors of distant and closer environment conditioning not only the implementation of the management concept but also widely understood entrepreneurship. The main determinants of the development of enterprises are, above all, the factors of proximity, which include the high socioeconomic level of the region or the traditions of entrepreneurship and innovation in the region (Czupich 2012, p. 211). These factors are important for implementing changes to the new management concepts, as the overall propensity to change also translates into the tendency to change management concepts. Equally important from the point of view discussed herein are three aspects of the closer environment, which include customers, suppliers and competitors (Skowron-Grabowska, Mesjasz-Lech 2016, p. 22-28). Lean terms and conditions almost require the organization to undertake broad cooperation and mutual initiative with both suppliers and customers. These activities are aimed at strengthening mutual cooperation and collective work on raising the standards of offered products (products and services) and continuous improvement of processes (Pabian 2015, p. 7-16). It is worth noting here that both the supply chain and the industry themselves provide the interpenetration of the management and organizational practices used in the units (Kościelniak 2016, p. 65-73).

When analyzing the development of the Lean Management concept it is not difficult to see that it was developed and developed in the automotive industry. The spectacular successes in terms of operational efficiency of the car industry have stimulated Lean practices in more production sites, more often in the same geographical area. As a result of the influence of the environment closer to shaping the structure and even the profile of the organization's activity is also the creation of specific geographical areas characterized by the production of a specific product range (cooperation, cluster structures). This is facilitated by the local atmosphere as well as the skills and qualifications of people living in the area, enhanced by the rotation of employees between individual production sites (Skowron-Grabowska, Tomski, Dunay, Illes 2016, p. 10-14).

Effective implementation of various practices and tools that fit into the Lean concept are described and documented in many industries, but most often in addition to the automotive industry they are found in the computer and aerospace

industries. Researchers have explored the possibilities of applying Lean practices in various sectors. Based on the research conducted, they have proved that there are external factors which determine the success of the implementation of this concept in economic practice. It is worth pointing out that there are studies that say that in every sector, Lean management brings the expected benefits. External factors that are the main barrier to implementing the Lean concept are: variable economic conditions, high uncertainty of demand – production risk, high diversification of production in the sector, organizational models characterized by rigid organizational structures. Cooney's research makes it clear that the nature of production in the sector should determine the choice of a specific production strategy and a leading management approach. In addition, his research has indicated that it is a mass-production push system rather than a suction system that is particularly recommended for automotive component manufacturers because of the instability and diversity of customer demand and the customer relationships which get increasingly shorter (Cooney 2002, p. 1130-1147). Katayama and Bennett also pointed out that manufacturers who operated their businesses in line with Lean Management had faced problems related to diversity and reduced demand for the product (Katayama, Bennett 1996, p. 8-23). All started to wonder whether Lean's success in the 1990s was not just the external factors such as the dynamic development of the industry, the absorbing market, the favorable economic conditions of Japan comparing the rest of the world.

The influence of identified external conditions on the effectiveness of the implementation of the Lean Management concept – empirical research

The aim of this article is to try to determine the strength with which external factors determine the success of Lean Management. In order to achieve this goal, surveys were conducted using the questionnaire survey. The selection of companies was not random but their number was small, so the survey is of a contributing character and may be the initial stage of wider research. The research was guided by the following assumptions: the surveyed companies are managed according to the Lean Management concept (in each of the companies surveyed, at least five Lean tools are used, ie, 5S, Kanban, SMED, Just in Time, and Poka Yoke, moreover an organizational unit for everyday activities aimed at achieving operational excellence through continuous improvement activities is in each of the companies).

Fourteen companies from the automotive industry (four large and ten medium enterprises) joined the study. In each company, questionnaires were filled in with both direct production staff and middle managers. A total of 628 correctly completed questionnaires were received – 596 from direct production staff and 32 from middle management. The research was carried out in September 2017, all companies are located in Czestochowa and in Czestochowa powiat (county).

The questionnaire contained 11 previously identified key external conditions that stimulated both initiation and effective implementation of the Lean Management concept. Respondents were asked to identify up to three of their most important external conditions. At the same time respondents had at their disposal three points that they could freely dispose of (they could admit, for example, to each of the three selected factors, one point or one factor, three points). The research results were compiled and analyzed taking into account the division due to the occupied position

Table 1. Distribution of responses in the assessment of the impact of particular conditions on initiation and effective implementation of the Lean Management concept

No.	Condition	Production personnel	Middle managers
1.	High socioeconomic level of the region	79 (5%)	4 (4,2%)
2.	Entrepreneurship and innovation traditions in the region	89 (5%)	2 (2%)
3.	Applying tools and concept assumptions in economic practice among enterprises in the region	57 (3%)	12 (12,5%)
4.	Initiatives stimulating entrepreneurship and innovation in the region undertaken by self-governments	132 (8%)	4 (4,2%)
5.	The ability to improve professional qualifications based on available programs and projects	445 (24%)	25 (26%)
6.	Availability of EU support	3 (0,1%)	2 (2%)
7.	Availability of IT, consulting support	314 (17,5%)	13 (13,6%)
8.	Activity of units with foreign capital within the region	242 (13,5%)	13 (13,6%)
9.	Appropriate educational programs in the mass media	373 (21%)	4 (4,2%)
10.	Higher education of the inhabitants of the region	25 (1,3%)	2 (2%)
11.	Scientific and research activities and cooperation between science and practice zones	29 (1,6%)	15 (15,7%)
Total		1788 (100%)	96 (100%)

Source: Own study based on the research

By analyzing the results of the research, many conclusions can be drawn regarding the assessment of particular conditions impact on initiation and the effective implementation of the Lean Management concept.

- Production staff recognize that Lean Management is the most important stimulus and conditioning factor for implementing the Lean Management concept, with the ability to increase professional qualifications based on available programs and projects (24%). It is therefore fair to say that companies focused on implementing Lean Management are concerned about the need for training programs and projects that are closer to the organization where employees will be able to acquire new skills while minimizing the fear of change as a major source of resistance.
- Fear of change and importance of activities aimed at providing the necessary information is also confirmed by the following selection of respondents, who as the next factors supporting the effectiveness of implementing the Lean management concept have identified appropriate media education programs (21%) and the availability of information, advisory, consulting (17.5%).
- The production staff also pointed out that the applied patterns and economic practices are also significant, which results directly from the activity of units with foreign capital in the region – 13.5%.
- As for middle managers, the same as the production staff, the most important factor was the ability to improve their professional qualifications based on the available programs and projects (26% of indications), which may also indicate the need to continuously improve their qualifications among these employees.
- The following are equally assessed among management personnel in terms of their role in initiating and stimulating activities aimed at implementing the Lean Management concept: the availability of information, consulting (13.6%), and activities of units with foreign capital in the region (13.6%).
- Differences in perceptions in both groups are noticed in two cases:
 - educational programs in the mass media, which are important only for production workers and not for managers, and
 - application of tools and concepts in business practice among enterprises in the region, which are important for managers and not for production workers.

This difference is probably due to a different view of the phenomenon resulting from the multiplicity of sources of information about today's popular tooling solutions that fit into the applied management concepts, including Lean Management.

Conclusions

The implementation of the Lean Management concept is conditioned by many factors from the beginning. These conditions come from the company itself, shaping its organizational culture as well as its environment. Macro factors and competitive environment affect the company's strategy, including the choice of management concepts. Research has shown that a closer-competitive environment

largely determines the practices that are practiced in companies. Moreover, the region, its development and initiatives undertaken by local governments in the context of training and development programs for citizens are crucial. It is also important to create favorable conditions for the activities of companies with foreign capital, which often involve new solutions in the organization and management of enterprises.

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UWARUNKOWANIA ZEWNĘTRZNE A WDRAŻANIE KONCEPCJI LEAN MANAGEMENT W PRZEDSIĘBIORSTWIE

Streszczenie: Koncepcja Lean Management należy do powszechnych współcześnie koncepcji zarządzania. Jej popularność wzrasta za sprawą coraz wyższych wskaźników efektywności organizacji ją stosujących. Zatem coraz więcej przedsiębiorstw wdraża Lean Management. Zachęcone wizją doskonałości operacyjnej podejmują wysiłek ukierunkowany na wprowadzenie niniejszej koncepcji. Szczególnym uznaniem cieszy się ona wśród przedsiębiorstw automotive, skąd się wywodzi. Celem niniejszego artykułu jest identyfikacja oraz charakterystyka zewnętrznych uwarunkowań wdrażania Lean Management. Dodatkowo w ramach realizowanych badań empirycznych podjęto próbę określenia wpływu poszczególnych, wcześniej zidentyfikowanych uwarunkowań zewnętrznych na osiągnięcie sukcesu w zakresie wdrożenia koncepcji Lean Management. Całość zakończono wnioskami.

Słowa kluczowe: uwarunkowania zewnętrzne, koncepcja Lean Management, wdrażanie



THE CONCEPT OF SMART SPECIALISATION AS AN INNOVATION MANAGEMENT INSTRUMENT IN LIGHT OF POLISH AND AUSTRIAN EXPERIENCE

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Abstract: This paper presents theoretical assumptions of the concept of smart specialisation and complementary theories of regional development in the aspect of innovation management. The strategy of smart specialisation, which involves the processes of creating a vision of regional development, setting strategic priorities, and searching for competitive advantages to maximise knowledge-based potential, highlights at the same time the necessity for regions to become specialised due to their differences, which constitute their strengths and allow them to stand out, and stresses the importance of strengths increasing regional innovativeness, which allows overall economic growth to be achieved. As smart specialisation relies on the identification of areas in which a region may demonstrate specific resources that are difficult to copy in other regions, the paper presents the Polish and Austrian experience. The paper has a review character and is an attempt to systematise knowledge about smart specialisation at the regional level.

Keywords: smart specialisation, innovation management, Silesian Voivodeship, Upper Austria

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Introduction

The concept of smart specialisation is a result of the works by the Expert Group *Knowledge for Growth*, established in 2005 as a consultative body by Research Commissioner J. Potočník. The assumptions of the idea of regional specialisation, whose co-author was D. P. Foray, among others, were presented in 2008 in the working documents of the above mentioned consultative body (Szostak 2015, p. 209-217) and in a report containing recommendations on the functioning of the European Research Area (Markowska, Strahl 2016, p. 118-129) in the context of the increasing importance of the processes of globalisation, agglomeration and networking. Between 2009 and 2011, the issue of smart specialisation dominated the scientific and political discussions of the international forum: the Organisation for Economic Co-operation and Development (OECD) (Pleśniarska 2016, p. 209-225) and the Joint Research Centre (JRC) of the European Union.

The concept was disseminated mainly thanks to the Communication from the European Commission Europe 2020: Strategy for intelligent and sustainable development facilitating social inclusion (Prusek 2015, p. 11-18). Smart

specialisation is closely connected with the main priority of the programme Europe 2020 – intelligent growth, i.e., development of the economy based on knowledge and innovation (Szostak 2015, p. 209-217), and its leading project, Innovation Union, which obliges member states to modify their regional innovation strategies (RIS), with special reference to the development of a vision of regional growth, setting strategic priorities, identifying competitive advantages of the different regions and using intelligent policies to maximise their knowledge-based endogenous potential (Gasz 2015, p. 317-326).

The aim of the paper is to discuss the assumptions of smart specialisation and to present its theoretical bases with respect to innovation management in light of the Polish and Austrian experience.

The concept of smart specialisation in the aspect of innovation management

Smart specialisation is a concept of defining a strategy for innovations and a tool used to define and maintain the current and future position of a region or country in the knowledge-based economy (Nowakowska 2015, p. 310-318).

The basic requirements and assumptions of the idea of *smart specialisation* include:

1. Creation of an area of research and innovation that is large enough to enable competition between numerous rivals. An example of such an area is the *European Research Area* (ERA), which is an integrated, transnational area that enables mobility of resources, such as a free flow of knowledge and a more effective use of economies of scale and spillover effects, and reduces structural barriers to competitiveness (Wolniak 2016, p. 407-419).
2. Concentration of activities on those areas of science and innovativeness that are complementary to resources of a given region and strengthen its comparative advantages. It is also important that regions do not aspire to the position of a leader in the same scientific fields, areas of innovativeness or economic sectors as most of them fail to implement their objectives due to a lack of the appropriate critical mass, economies of scale and range. Smart specialisation requires that connections be created between research and development, human capital development and specific economic conditions of regions and countries. The consequence of *smart specialisation* should be increased differentiation between the European Union's regions in the area of scientific, technological and economic specialisation (Nowakowska 2016, p. 56-66).
3. Creation of so-called general purpose technologies (GPTs) (Hotz-Hart, Rohner, 2014a, p. 1-24) that can fulfil the role of enabling technologies that facilitate economic growth (Cremer 2014, p. 253-265). Currently, the concept of GPTs has been replaced by the concept of key enabling technologies (KET) (Hotz-Hart, Rohner 2014b, p. 295-320).
4. The implementation of smart specialisation that takes place as part of *entrepreneurial learning process* aimed at identifying scientific areas, technologies and industrial branches that determine the competitive advantage

of a specific region on the European and global scale (Nowacki 2014, p. 14-21).

The attribute of entrepreneurship that accompanies the identification of *smart specialisation* does not mean, however, that entrepreneurs are the only group involved in this activity. The strategy of smart specialisation is not defined in a top-down fashion by public administrative bodies or external advisers. Therefore, domestic and regional administrations fulfil a significant role in its implementation, which involves (Harfst, Wirth 2014, p. 463-475):

- concentrating various partners around the formulation of a strategy and adjusting public aid to specialisation areas;
- analysing public aid;
- defining complementary investments to the emerging specialisation;
- undertaking promotional activities connected with networking as part of general purpose technologies between various partners.

In the conditions of globalisation and increasing competitiveness, we can see a growing role of the knowledge-based economy that is able to create and implement various types of innovations (Skowron-Grabowska, Sukiennik 2015, p. 1046-1051; Brzozowska, Szymczyk 2017, p. 377-387). Innovation management is thus of increasing importance for social and economic development, both on the global and local scales. At the same time, it is often connected with high risk and the necessity to use significant knowledge and financial resources, which constitutes a barrier to the increase in innovativeness of enterprises (particularly small and medium ones) (Jelonek 2016, p. 57-66). The elimination of this barrier and recognition of innovations as growth determinants causes practically all developed countries across the world to use certain models of innovation management (Kościelniak, Skowron-Grabowska, Nowodziński 2017, p. 14), applying methods and instruments for supporting innovations. They may impact various spheres, areas and entities of the social and economic system, particularly enterprises and scientific and research facilities. As the need to support innovations is indisputable, it is necessary to rationally choose the method for managing innovations in the aspect of their effectiveness. At the level of a region, an important aspect of managing innovations is RSI (regional strategies of innovations), and the driving force behind their implementation is the concept of smart specialisation.

Smart specialisation is a concept and a tool for innovation management, used to define and build the current and future position of a region or country in the knowledge-based economy (Knop, Szczepaniak, Olko 2014, p. 239-253). In the case of regional development, smart specialisation is based on the relationships among science, the public sphere, education and business. In the context of such relationships, the main condition for the development of smart specialisations of a region is to use its potential through the best possible adjustment of the directions of scientific development and education to its social and economic specificity.

Enterprises are the main entities in the model of RSI implementation. This strategy is mainly addressed to them - they are its beneficiaries. At the same time, what is very important is the effective implementation of the innovation strategy

that depends on the behaviour of enterprises and appropriate management of innovations. Management of innovations is an enterprise's ability to develop innovative projects, absorb innovations and apply and disseminate them. Appropriate management of innovations is an attribute of an enterprise that allows it to compete in a situation when its competitive advantage is based on innovations (Stabryła 2015, p. 169-178).

Enterprises' chances for increases in innovativeness connected with effective management of innovations in the aspect of the development of smart specialisations result from:

- the possibility of conducting business activity as part of a specific specialisation using attributes of this specialisation that enable increased capability of creating and absorbing innovations;
- the use of and participation in projects, programmes, undertakings and operational activities implemented as part of RSI, connected with the development of smart specialisations.

Smart specialisation as a concept inscribed in the aspect of innovation management assumes that no country or region is a leader in all areas of science and innovativeness (Kriegesmann, Kerka 2014, p. 73-87). However, each of them has a certain potential that allows it to achieve competitive advantage in a specific area. A practical manifestation of smart specialisations that facilitate such development is a new approach to innovation management in the aspect of creation and definition of objectives in regional strategies of innovations (Seroka-Stolka, Nowakowska-Grunt 2012, p. 206-211). The idea of this approach focuses on optimal use of the potential of the different regions and definition of the directions of their development that are consistent with their specific conditions, i.e., there is a match in the triangle: science – education – economy.

Smart specialisations under Polish conditions

The process of identifying smart specialisations in the different regions of Poland has not been completed. The selection of the priority areas identified so far has been based on the assessment of endogenous resources of voivodeships and on social consultations. The different regions relied on, among other things, foresight, industry analyses, technology mapping, expert panels, workshops with entrepreneurs and the scientific sector, and measurements of maturity of cluster structures (*Badanie potencjałów ...*, 2013). According to the results of studies conducted as part of the workshop project Smart specialisation of a region - methods, indicators, tools, the identification of smart specialisation was based, among other things, on assessment of infrastructure and resources, review of networks of institutional, cluster relationships between institutions of the business environment, external expert recommendations, methodology recommended by Platform 3s and analysis of value chains. The factors considered during the identification of specialisations also included innovativeness of SME, technological innovations, human capital, possibilities of industry transformation

and modernisation, social challenges, diversification potential, niche areas and non-technological innovations (Gawlikowska-Hueckel, Szlachta (red.) 2014).

Silesia is one of the first regions in Poland that joined the platform of smart specialisation of regions. Works on the strategy for the development of the Silesian Voivodeship are conducted by the councilmen of Silesian Voivodeship sejmik, the voivodeship executive board, the Steering Committee for updating the development strategy for the Silesian Voivodeship for the years 2000-2020, the Moderator of the process of updating the development strategy and a Team for the implementation and monitoring of the development strategy for the Silesian Voivodeship for the years 2000-2020 (*Model wdrożeniowy ...*, 2013).

Priorities set by those managing the Silesian Voivodeship include significance for the development of the voivodeship and the potential of a specific industry or area. The list of key technological areas includes eight industries: medical technologies, technologies for the power industry, mining and environmental protection, information and telecommunications technologies, production and processing of materials, transportation and transport infrastructure, mechanical engineering, the automotive, aviation, and mining industries, nano-technologies and nano-materials (*Regionalna Strategia Innowacji ...*, 2012).

For the Silesian Voivodeship, the Regional Strategy for Innovations of the Silesian Voivodeship for the years 2013-2020 has been developed, which is the second document of this type in the region. The first innovation strategy was implemented between 2003 and 2012. The importance of strategic studies is connected with the effective achievement of objectives and the possibility of implementing strategic initiatives in a broad sense, which is closely related to the implementation of the RSI model and its essential components, i.e., smart specialisations. It is the growth potential of smart specialisations, which results from the use of scientific and research potential of the region, and the preferences in its financing that determine the capability of implementing the objectives of RSI and thus the effectiveness of its implementation. Studies were conducted as part of a system project implemented by the Silesian Marshall's Office in Katowice (*Regionalna Strategia Innowacji ...*, 2012). The subject of project studies and works were methods, instruments and ways of application of the RSI approved for the voivodeship. The model of implementing the Regional Strategy of Innovations developed for the Silesian Voivodeship for the years 2013-2020 is largely based on the development of smart specialisations, which, for the region discussed are the power industry, medicine (in a broad sense) and information and communication technologies.

The idea that guided the development of the RSI for the Silesian Voivodeship was the transformation of the existing regional system of innovations into an ecosystem of innovations – a multi-level system that looks for new solutions and areas and smart specialisations that distinguish the region and build its competitive potential. An ecosystem of innovations is able to configure and use regional resources as well as obtain global resources for the development of smart specialisations and achievement of objectives that determine the development of innovations in the Silesian region (*Zarządzanie, wdrażanie ...*, 2013). In this

context, the regional ecosystem of innovations of the Silesian Voivodeship was developed based on five strategic areas:

- common knowledge and innovations;
- network of public services;
- infrastructure of the regional ecosystem of innovations;
- SME in global economy chains;
- talents and competences.

However, the implementation of the Regional Strategy of Innovations, treated as a complex, socially and economically multifaceted project, required selection of proper methods and instruments as well as means of its implementation, presented in a specific model, which was implemented based on the creation and development of smart specialisations in the region. The main elements of the model of RIS implementation were smart specialisations, meta-projects, processes, actors and a management and coordination model, as presented in *Figure 1*.

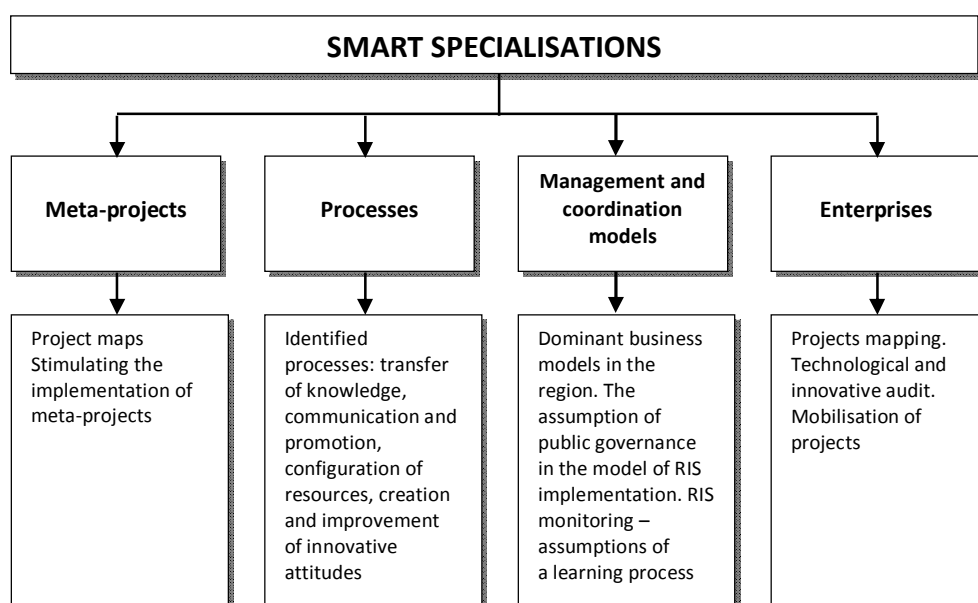


Figure 1. Model of implementing RIS in Silesian Region

Source: (Regionalna Strategia Innowacji ..., 2012)

It should be stressed that processes in a broad sense, which are implemented by means of projects that are appropriately selected for the creation of innovations, constitute very important elements of the implementation of RIS. An in-depth analysis of the structure and configuration of the ecosystem of innovations of the Silesian Voivodeship, as well as the conditions of the implementation of the Regional Innovation Strategy, enabled the identification of the main processes that allow its objectives to be implemented. They include (*Wyzwania strategiczne ...*, 2010):

- transfer of knowledge;
- configuration of resources;
- communication;
- creation and improvement of innovative attitudes.

As has already been stressed in the case of the RSI of the Silesian Voivodeship, smart specialisations constitute its fundamental components. The selection of smart specialisations in the Silesian Voivodeship was based on the following conditions (*Regionalny Program Operacyjny ...*, 2013):

1. Necessity of identifying unique characteristics and assets of the region used to build competitive advantages;
2. Activity and concentration of regional partners and resources around the vision focused on the achievement of a higher level of prosperity;
3. Development and strengthening of regional innovation systems;
4. Maximisation of knowledge flows and dissemination of the benefits of innovations across the entire regional economy.

In light of the above-mentioned aspects, it should be stressed that smart specialisation requires cooperation between companies, research institutions, universities and local authorities to identify the most promising areas of specialisation, as well as weaknesses and barriers that hamper the implementation of innovations in the region. The selected smart specialisations of the region, i.e., the power industry, medicine and information and communication technology, closely correspond with the priorities and strategic areas of the RSI and, most importantly, are connected with the strategic objectives. The proper selection of the projects of smart specialisations and their effective implementation determine the effectiveness of the implementation of the RSI in the Silesian Voivodeship.

The concept of smart specialisation using Upper Austria as an example

While many countries and regions are still developing their strategies of smart specialisation and defining priority areas, the region of Upper Austria is already systematically implementing this concept. Upper Austria is a region whose authorities took decisive actions aimed at the development of innovations and technologies, as well as the creation of the Regional Innovation Strategy. The main aim was to change the direction of creating the system for supporting innovations. This aim constituted the response to the needs of the scientific, political and economic circles of the region. In the long-term, the aim of actions to be undertaken and the Regional Innovation Strategy was to create an effective system for supporting innovations that would make Upper Austria the leading region in Europe. The Regional Innovation Strategy included the following detailed objectives:

- strengthening cooperation between companies and technology suppliers in the area of innovations;
- intensification of research and development activity;

- increasing the commercial use of the results of research and development activity;
- promoting innovations and awareness building.

It is worth highlighting the fact that in the region of Upper Austria, a comprehensive economic and research strategy containing elements of the concept of *smart specialisation* has been used (Keuschnigg 2014). It should also be stressed that Upper Austria has an advantage over other regions in that it is characterised by a large number of technological clusters, appropriate universities and technological networks in strategic sectors, which constitute the basis for implementing this concept. The strategic framework of the policies used for the operation of local authorities of Upper Austria was based on two programmes: “Regional Competitiveness Upper Austria 2007-2013 Program” and “Innovative Upper Austria 2010 plus”, which was approved in 2010 and continued until 2013. Both these programmes were meticulously updated to include issues connected with the concept of *smart specialisation*. While choosing the priorities in the area of specialisations, it was decided that megatrends and large global achievements in research and development, the so-called *big global R & D topics* (nanotechnology, biotechnology or genetic engineering), should not be copied uncritically; instead, the focus should be mainly on regional resources. The areas of specialisation were divided into two categories: the first of them included the assets occurring in the region and research sectors constituting the so-called double strength and referring to such areas as mechatronics and process automation, innovative materials and information and communication technologies. The second category included targeted sectors of the economy, the so-called prospective sectors, such as *life science* and logistics or sources of renewable energy. Management structures were defined as bottom-up, stressing the significance of continuous interactions occurring between local authorities and entities operating in the area of innovations (Granig, Hartlieb, Lercher 2014).

It should be stressed that since 1998, Upper Austria has been pursuing a policy aimed at the development of strong economic and technological links between enterprises and research and development institutions by supporting clusters, competence centres and networks. As a result of undertaken activities, eight cluster initiatives in different industries of the economy were established in the region of Upper Austria, namely, automotive industry, plastics, furniture, food products, eco-energy, health, mechatronics and technologies connected with environmental protection. Moreover, the support covered four inter-industry networks operating in the area of human resources, logistics, media and effective use of energy (Pechlaner, Reuter (Hrsg.) 2014).

In the definition of the policy at the regional level, financial instruments were also used to help to create optimal frameworks for the functioning of clusters with reference to the creation of networks, promotion of clusters, consultancy, skills upgrading, establishing cooperation and transfer of technology. In this context, the financing of cluster-oriented innovative projects has clearly become part of the implementation of a strategy of *smart specialisation* (Dujmovits 2015, p. 29).

However, we cannot ignore the fact that the region of Upper Austria shows the characteristics of the *triple helix* structure, in which all entities that are important from the perspective of innovations, i.e., public authorities, universities and research facilities, and business, are connected not only by formal but also by informal links. The system created in Upper Austria is positively perceived due to not only the set of well-developed clusters but also to implemented formal procedures that allow all entities involved in the development of innovations to unite by formulating a coherent, strategic programme with a set of appropriate instruments for its implementation. It is also worth highlighting the fact that in 2011, a holding *Upper Austrian Innovation Holding GmbH* was established in Upper Austria to integrate activities of all educational institutions in the region, research facilities and agencies promoting the economy of the region and innovations to increase the effectiveness of activities in the area of innovations (Schneidewind 2013, p. 117).

The process of building the Regional Innovation System of Upper Austria, as a direct result of the implementation of a large number of initiatives, is based on the experience and potential of a large group of institutions and enterprises in the region. At the same time, the construction of the system of innovations shows that these institutions are linked by webs of mutual task-based dependence, which is directly connected with the implementation of defined initiatives. We should thus stress that the implementation of actions as part of an innovation system requires cooperation at the level of institutions in the region, country, and in numerous cases - also at the international level. As a consequence, the list of the participants of the RIS of Upper Austria includes a range of other institutions and is constantly becoming longer.

An important characteristic of the RIS of Upper Austria is its functionality, which enables visible market effects to be achieved through the process of verifying success factors and effective management of innovations in the region.

The methodology for assessing the RIS of Upper Austria uses a comprehensive system of tools for monitoring and assessing an innovation policy pursued by this region. The aim of the system is to collect data on the results of innovation-supporting activities designed to improve implementation instruments, justify the disbursed amounts and popularise successful initiatives undertaken as part of the strategy.

Moreover, the RIS defined the following main aims:

- strengthening cooperation between companies and technology suppliers in the area of innovations;
- intensifying the research and development activity;
- increasing the commercial use of the results of research and development activity;
- promoting innovations and awareness-building.

With the development of the Regional Innovation Strategy of Upper Austria, a scheme, which is presented in *Figure 2*, was defined for building a system for supporting innovations in the region, which included innovations, technologies, cooperation, internationalisation, and mobilisation of start-ups.

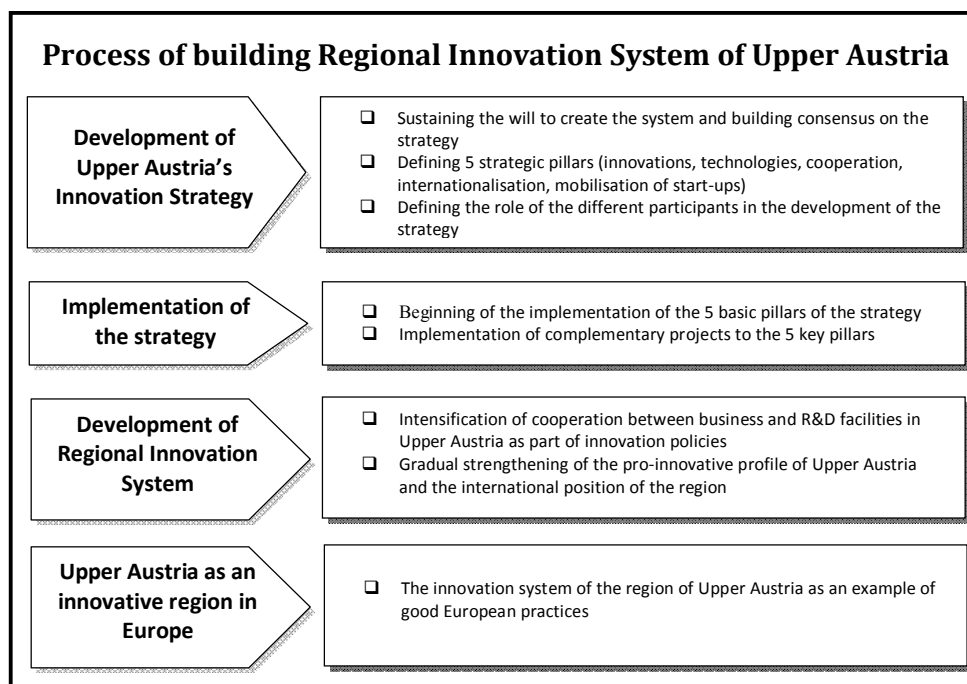


Figure 2. Scheme was defined for building a system for supporting innovations in the region of Upper Austria

Source: Own work based on (Schneidewind 2013, p. 117)

The aim of the RIS in the region of Upper Austria was to look for new mechanisms of support that are the result of more advanced needs of enterprises, defined on the basis of successes achieved in the process of innovation. The substantive scope covered the entire process of creating innovations, starting with gathering information about innovations, through accompanying companies in initiating innovation activity and professional expert support to create conditions for effective international cooperation between regional companies.

Conclusions

In the 21st century, the low competitiveness of the economy and deepening distance with respect to the world economic powers has become a key problem. These issues have become the basis for criticising the existing innovation policy and searching for new ways, tools and trajectory of development. The response to these challenges is the concept of smart regional specialisations proposed along with a new vision of EU development in the strategy Europe 2020. Smart specialisation is a new paradigm of the management of innovations in the aspect of their competitiveness. It is, at the same time, a new way of shaping a regional

innovation policy designed to eliminate existing barriers and failures in building innovation capacities of regions.

The concept of smart specialisation, presented in the light of the Polish and Austrian experience, is both the idea of creating innovation capacities of regions and a tool for managing innovations by building a unique competitive position of regions at the international arena. It is based on simple, even obvious assumptions. However, it requires difficult and complementary actions, starting with the identification of territorial resources and technological advantages, through identification of actually functioning networks, and ending with the selection of specialisation domains and definition of a comprehensive and individualised regional policy.

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KONCEPCJA SMART ORGANISATION JAKO INSTRUMENT ZARZĄDZANIA INNOWACJAMI W ŚWIETLE DOŚWIADCZEŃ POLSKICH I AUSTRIACKICH

Streszczenie: Niniejszy artykuł prezentuje założenia teoretyczne koncepcji smart specialisation oraz komplementarne wobec niej teorie rozwoju regionalnego w aspekcie zarządzania innowacjami. Strategia inteligentnej specjalizacji, obejmując procesy kształtowania wizji rozwoju regionalnego, ustalania priorytetów strategicznych, poszukiwania przewag konkurencyjnych w celu zmaksymalizowania potencjału opartego na wiedzy, akcentuje jednocześnie konieczność wyspecjalizowania się regionów ze względu na ich odmienność, która stanowi o ich sile i możliwości wyróżnienia się, oraz podkreśla znaczenie mocnych stron zwiększających innowacyjność regionalną, umożliwiającą osiągnięcie ogólnego wzrostu gospodarczego. Ponieważ istotą inteligentnej specjalizacji jest wskazanie obszarów, w przypadku których region może wykazać się specyficznymi zasobami, trudnymi do naśladowania w innych regionach, w artykule zaprezentowano doświadczenia polskie oraz austriackie. Artykuł ma charakter przeglądowy i stanowi próbę usystematyzowania wiedzy dotyczącej inteligentnej specjalizacji w ujęciu regionalnym.

Słowa kluczowe: smart specialisation, zarządzanie innowacjami, województwo śląskie, Górna Austria



LOGISTICS CUSTOMER SERVICE IN TERMS OF CREATING COMPETITIVE ADVANTAGE OF THE SELECTED PASSENGER TRANSPORT COMPANY – PRZEDSIĘBIORSTWO KOMUNIKACJI SAMOCHODOWEJ(PKS)

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Abstract: The paper presents solutions based on prosumer energy, which in a broad aspect of its application facilitates reduction of harmful low emission impact on the environment. Additionally, the authors characterize in it issues concerning prosumer energy and limiting negative influence of low emission, which have a direct influence on widely understood ecosystem. A very important feature of the paper is the presentation of the research results on the surveyed group awareness in the scope of low emission harmfulness and counteracting it through implementation of prosumer actions.

Keywords: prosumer energy, management, low emission

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Introduction

Industrial Revolution originated in England in the 18th century became the basis for the industrial era that lasted till the end of the 20th century (Chwalba 2008, p. 68; Nieć 2013, p. 27). At that time, the success of enterprises was largely dependent on the efficient and effective use of technical inventions in mass production. However, the world of the 21st century is characterized by dynamic changes in the conditions in which enterprises operate. This forces them to constantly search for new strategic solutions to help them survive the crisis. Therefore, it is necessary to ask what elements determine competitive advantage and survival and development of enterprises in the present turbulent environment?

The essence of logistics customer service in terms of creating competitive advantage

The acceleration of the accumulation and availability of knowledge, observed for twenty years, is the reason for basic economic changes with which an increased interest in the issues concerning the management of intangible assets is associated. The knowledge-based economy brings about the occurrence of new sources of competitive advantage among which there can be listed well-organized customer service (Urbanek 2011, p. 7).

As early as 1980 it was highlighted that in the era of universal access to high-quality services and goods offered at similar prices only effective customer service is able to draw their attention. The key factor is to make this in a clear and durable manner. Customer service is the manifestation of the functioning of the whole logistics system of the company and the result of actions taken in the areas such as marketing, finance, transport, storage or forecasting the demand (Walasek 2014, p. 281).

In creating the due customer service an important role is undoubtedly played by logistics, which is accurately illustrated by the principle of 7Rs (Jodejko, Nowakowski 2008, p. 1068; Beier, Rutkowski 2001, p. 40). The issue of logistics customer service is very often discussed in literature (Budzik, Petryczka 2016, p. 97-108; Frazelle 2015, p. 115-120; Florez-Lopez, Ramon-Jeronimo 2012, p. 41-57; Halicka, Święcka 2012, p. 211-225; Deska, Szczepańska, Wypych 2012a, p. 360-365; Deska, Szczepańska, Wypych 2012b, p. 48-52; Lis 2011, p. 2251-2261). When reviewing literature it can be observed that this concept can be seen as the ability to satisfy the expectations and requirements of customers at the right time and place.

The due customer service should always be at the highest possible level. One ought to properly take care of the customer and not offer them a single service. All the activities in the form of the way of communicating with the customer, listening to them, observing their reactions to the questions asked or paying attention to polite forms, i.e. all forms of cooperation between them and the enterprise, influence the quality of customer service (Dolat 2013, p. 32-34).

Due to customers, all enterprises are able to operate in the market since they are the source of income. The customer is one of the most important values in the company and they need to be taken care of and treated as a partner for cooperation (Smolnik 2016, p. 1547).

Proper customer service is the source of a positive and long-term experience which will be well remembered by the customer and which will affect their willingness to cooperate with the company again (Dolat 2014, p. 93). Customer service is undoubtedly one of the elements of gaining competitive advantage of the company in the market (Strojny 2008, p. 1).

The issue of competitive advantage has been willingly discussed in the subject literature for many years (Wójcik 2016, p. 96; Ingram 2012, p. 139; Bednarz 2011, p. 113; Nowicka-Skowron 2010, p. 109-122). The changes observed in the business environment had major impact on it since the second half of the 20th century. It was a period of significant changes in the conditions of conducting a business activity and for this reason it was necessary to develop new ways of problem solving, the objective of which was to ensure the development of the enterprise and gaining competitive advantage (Dominiak 2013, p. 13).

When treating competitive advantage as exceeding the level of achievements compared to competitors, it must be based on three key criteria. The achievement must be significant for the customer, it must be noticeable by them and it must be characterized by durability (Simon 1999, p. 137). For this reason, it is created by

everything which positively distinguishes the enterprise in the eyes of the customer from among competitors (Fahey 1989, p. 18).

Another point of view on competitive advantage treats it as a situation in which the enterprise has opportunities to create more economic value. In this context, this value is understood as the difference between the value perceived by the customer and the total economic cost in relation to competitors (Barney 2011, p. 15-17).

Competitive advantage can also be seen as diversity or asymmetry of all the elements which, when allowing the company to satisfy customer needs, allow it to achieve mastery of operation and high value added to a greater extent than competitors (Ma 1999, p. 259).

One of the ways of achieving or maintaining competitive advantage is appropriate differentiation consisting in something which customers find unique. In this case, apart from the generally known characteristics of the product or service such as a brand or the technology applied it is also customer service (Elkin 2010, p. 68; Porter 1992, p. 51, 53).

Summing up, it can be indicated that competitive advantage is the achievement of the position by the enterprise that is superior in relation to competitors by offering customers services or products that simultaneously satisfy their needs and are better than those of competitors' (Krupski 2015, p. 7; Teneta-Skwiercz 2009, p. 194). While simplifying this definition even more, K. Oblój assumes that "competitive advantage consists in the fact of being a more attractive partner for customers than other companies in the specific field" (Oblój 2014, p. 101-115).

At the same time, it should be pinpointed that the achievement of sustainable competitive advantage is an uneasy task and sometimes even impossible to achieve (Michalak 2012, p. 73). Therefore, each enterprise wishing to succeed, must exploit the emerging opportunities and avoid any threats (Budzik, Zachorowska 2016, p. 96). Moreover, if it wants to achieve good results, it cannot operate in an ordinary way. It should adopt the way of operation other than competitors and the one building its uniqueness thus ensuring competitive advantage (Oblój 2016, p. 125; Griffin 2004, p. 251).

The characteristics of the investigated company

An important date in the history of the investigated company was 26 July 2006. Like many other PKSs belonging to the State Treasury or local government units it was subjected to the process of privatization and since then it has been operating as a private company.

The investigated Przedsiębiorstwo Komunikacji Samochodowej with the head office in the area of the Łódź Voivodeship mostly deals with the local passenger transport. Its network of communication links includes a few cities and several larger towns.

With appropriate licenses and permits, the company performs:

- regular passenger transport within the timetable,
- national and international tourist transport,
- school transport,
- employee bus transport.

In terms of passenger transport services the company offers normal fare and reduced rate tickets using statutory and trade discounts as well as single-fare tickets and season tickets in regular, accelerated and fast transport.

Moreover, the scope of its activity includes:

- car wash services for passenger cars, trucks and buses,
- repair services for all vehicles, including specialized ones,
- gas station and automotive store services.

The fleet possessed by the company consists of 100 buses almost 20% of which are city buses. In order to maintain its level of competitiveness, each year the company attempts to replace a few of its oldest vehicles with newer ones and possess vehicles of different size. At present the smallest vehicle is designed to transport 30 passengers and the largest one – 74 passengers.

The employment of the company amounts to almost 170 people. These are both white- and blue-collar workers, 120 of whom are employed in the position of a driver.

The analysis of logistics customer service in the investigated company

The analysis of logistics customer service in terms of creating competitive advantage was conducted on the basis of the survey which was addressed to the passengers using passenger transport services provided by the company. The research was conducted on a group of 100 respondents. The questionnaire consisted of 15 closed-ended questions divided into two parts.

The first part consisted of 11 closed-ended questions mostly of single-choice. Only one question allowed to indicate more than one answer and additionally, in another one, it was necessary to give an argument in favor of one of the answers. That part of the survey included the questions directly concerning the quality of the provided transport services of the investigated company which affect the level of its competitiveness.

In the first place, the respondents were asked about their general satisfaction with the passenger transport services offered by the surveyed company. For this purpose the following question was asked: “Are you satisfied with the provided transport services?” (Figure 1).

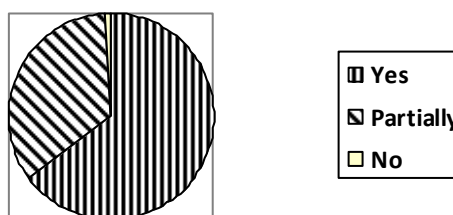


Figure 1. Satisfaction of the respondents with the provided passenger transport services

Source: Own study based on the conducted research

The vast majority of the respondents, i.e. 65%, answered in the affirmative. The group smaller nearly by half, whose share in that question amounted to 34%, was the respondents indicating partial satisfaction. Only one person indicated dissatisfaction with the investigated services.

The second question referred to satisfaction with the communication links offered by the surveyed company and was formulated as follows: “Are you satisfied with the offered communication links?” (*Figure 2*).

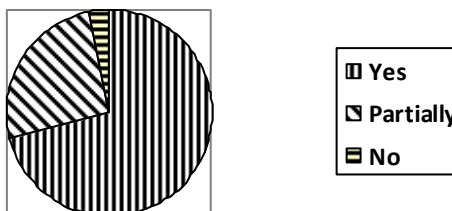


Figure 2. Satisfaction of the respondents with the offered communication links

Source: Own study based on the conducted research

The vast majority of the responses, since as much as 71%, indicated the affirmative answer. A much smaller share, amounting to 26%, belonged to the respondents indicating partial satisfaction, whereas only 3% of those questioned indicated that they are not satisfied with the offered communication links.

Subsequently, the respondents were asked about their satisfaction with the frequency of buses of the surveyed company and the formulated question was: “Are you satisfied with the frequency of buses?” (*Figure 3*).

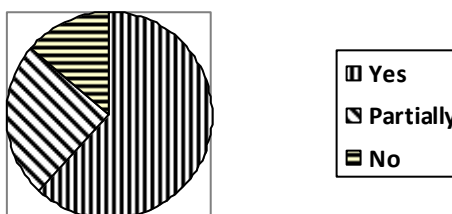


Figure 3. Satisfaction of the respondents with the frequency of buses

Source: Own study based on the conducted research

The answers indicating that the respondents were satisfied in terms of the frequency of buses amounted to 62%, whereas the ones only partially satisfied amounted to 24%. In turn, 14% of the responses indicated those who were not satisfied with the frequency of buses.

In order to complement the previous question, the respondents were asked to indicate the proposed changes in the frequency of buses and the following question was asked: “In your opinion, should the offered timetable be changed?” (*Figure 4*). In that question, the respondents were asked to indicate if it is preferable for buses to run less frequently, more often or whether to leave the timetable unchanged.

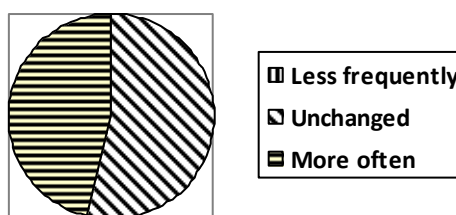


Figure 4. Preferences of the respondents concerning the frequency of buses

Source: Own study based on the conducted research

More than half of the respondents claimed that they were satisfied with the present timetable and there was no need to change it. Such an answer was given by 54% of those questioned. The other people were dissatisfied with it and indicated that buses should run more often. In turn, none of the respondents declared that they would like the buses of the surveyed company to run less frequently than it was taken into account in the timetable.

Subsequently, the respondents were asked to answer the question: “Have you often experienced the delay of a bus?” (Figure 5).

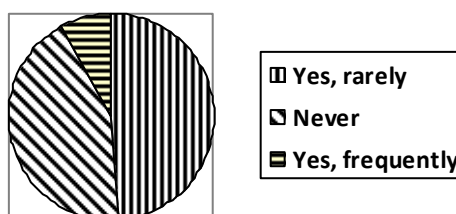


Figure 5. Situations with the delay of a bus in relation to the timetable according to the respondents

Source: Own study based on the conducted research

More than half of the respondents stated that they had experienced the delay of a bus in relation to the timetable. However, 49% declared that it happened rarely and 8% that the situation was frequent. In turn, 43% of the respondents stated that the bus had always been on time and they had never experienced its delay.

In the sixth question, the respondents were asked to provide information concerning the premature departure of a bus from a bus stop and the following question was asked: “Have you often experienced the situation of the premature departure of a bus from a bus stop?” (Figure 6).

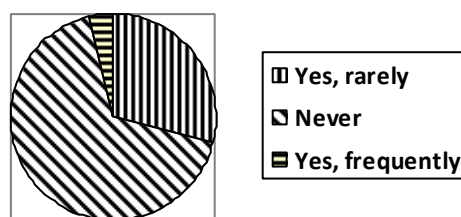


Figure 6. Situations of the premature departure of a bus in relation to the timetable according to the respondents

Source: Own study based on the conducted research

The answer indicating that the respondents had not experienced the situation of the premature departure of a bus from a bus stop amounted to 67%. In turn, 33% of the responses indicated that the respondents came across such situations. 29% of those questioned acknowledged that such situations happened rarely and 4% claimed that they were frequent.

The seventh question concerned satisfaction with the driver's job. The respondents were asked the following question: "Are you satisfied with the drivers' job?" (*Figure 7*). For that question, the respondents were also asked to give arguments in favor of their answer.

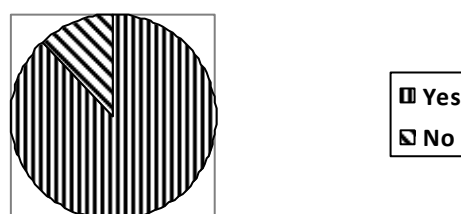


Figure 7. Assessment of satisfaction with the drivers' job

Source: Own study based on the conducted research

The vast majority of the respondents indicated that they were satisfied with the drivers' job in the surveyed company. Only 12% of the responses indicated the lack of satisfaction with their work.

The people satisfied with the drivers' job indicated different arguments for their opinions. In turn, those dissatisfied, as an argument, indicated not paying attention to noisy youngsters and listening to the radio too loud by the drivers.

The next question was to determine the level of the offered comfort of a bus ride. The respondents were to answer the question: "In your opinion, what is the offered comfort of a bus ride?" (*Figure 8*).

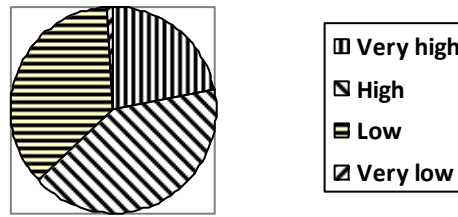


Figure 8. Assessment of the bus ride comfort according to the respondents

Source: Own study based on the conducted research

According to 41% of the respondents, the offered bus ride comfort is at a high level and according to 22%, it is very high. The bus ride comfort is low in the opinion of 36% of those questioned and one person rated it as very low.

The ninth question was associated with the previous one since it also referred to the comfort of a bus ride but, in that case, the respondents were to indicate the factors increasing its level. In the question: “Please indicate the proposal to increase the comfort of a bus ride” it was possible to tick more than one answer (Figure 9).

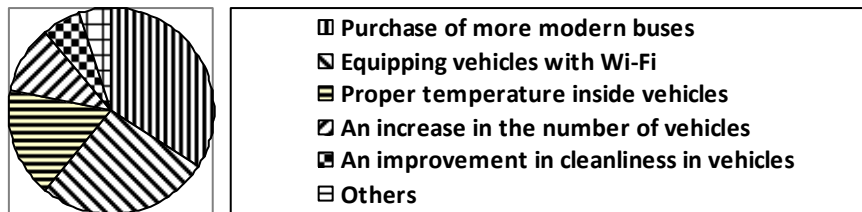


Figure 9. Proposals to increase the bus ride comfort according to the respondents

Source: Own study based on the conducted research

The response concerning the purchase of modern buses was indicated the most frequently and amounted to 34% of the answers. A slightly smaller share (27%) belonged to the equipping of vehicles with Wi-Fi. 17% of the responses referred to ensuring appropriate temperature inside vehicles. 11% indicated an increase in the number of vehicles and 6% – an improvement in cleanliness in buses, whereas 5% concerned the response of “others”.

The next-to-last question in that part of the survey concerned the ticket price in relation to the quality of the passenger transport services provided by the investigated company. The respondents were asked the following question: “How do you rate the ticket price in relation to the quality of the service?” (Figure 10).

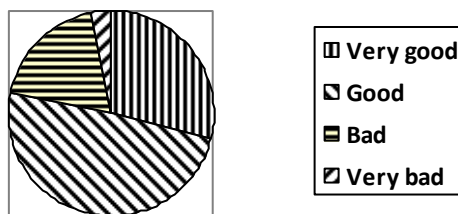


Figure 10. The ticket price in relation to the quality of the service according to the respondents

Source: Own study based on the conducted research

The most numerous group of the respondents, with the share of 49%, was the people who thought that the ticket price in relation to the quality of the provided services was at a good level. Another, a slightly smaller group, whose share amounted to 29%, was the respondents who claimed that the relation was very good. 19% of those questioned found the relation sufficient and 3% claimed that the ticket price in relation to the offered quality was definitely too high.

The last question in that part referred to the competitive means of transport. The respondents were asked the question: "If there were such a possibility would you use a different means of transport?" (*Figure 11*).

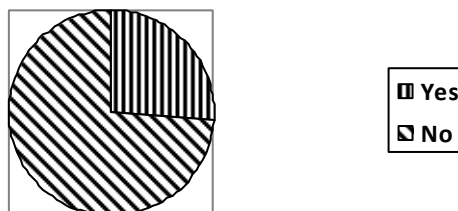


Figure 11. The possibility to use a different means of transport by the respondents

Source: Own study based on the conducted research

In the case of the use of a different means of transport the majority of the respondents answered that they would give it up. Such a response was given by 74% of the respondents. The others, i.e. 26% of those questioned, would use such an opportunity.

The second part of the questions referred to demographics and all the responses were closed-ended with a single possibility of selection.

The first question in that part of the survey referred to the respondents themselves where they were asked to indicate their gender (*Figure 12*).

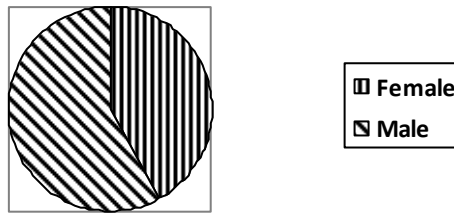


Figure 12. Gender of the respondents

Source: Own study based on the conducted research

The questionnaire was filled in mostly by women. Their share amounted to 58% of all the respondents whereas the share of men amounted to 42%.

The second question also concerned the respondents. In this case they were requested to indicate the proper age bracket (*Figure 13*).

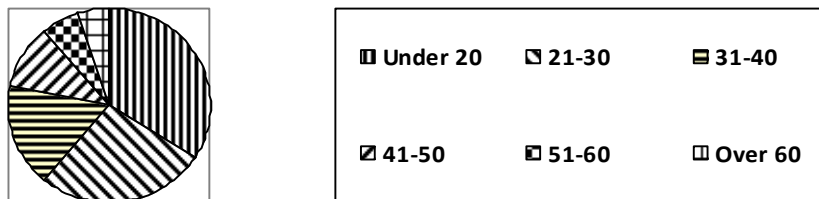


Figure 13. Age brackets of the respondents

Source: Own study based on the conducted research

The largest group of the respondents was people aged 21-30, for whom the share amounted to 36%. A slightly smaller share (31%) belonged to people under 20. The 31-40 age bracket was indicated by 16% of those filling in the questionnaire and the 41-50 age bracket – by only 11%. The smallest group of respondents was elderly people. The share amounting to 5% belonged to the respondents aged 51-60 and only 1% to people over 60.

Except for the questions concerning the respondents, in that part of the survey, there were also the ones associated with the frequency of using the passenger transport services provided by the surveyed company (*Figure 14*) and their destinations (*Figure 15*).

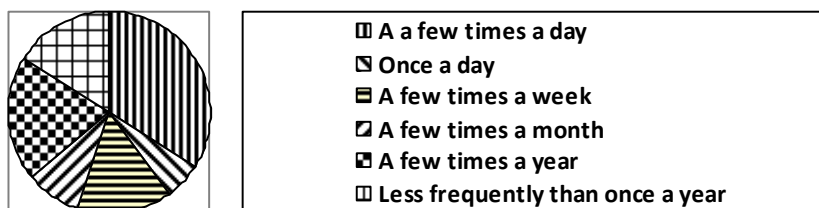


Figure 14. Frequency of using the services of the surveyed company by the respondents

Source: Own study based on the conducted research

In the case of frequency, the most numerous group, with the share of 34%, belonged to those using the services of the surveyed company a few times a day. In turn, the respondents using them a few times a year amounted to 20% of those questioned, whereas the ones using them a few times a week – to 16%. The people travelling by buses of the investigated company less frequently than once a year amounted to 15% of the respondents. Another group was the respondents using the transport of the company in question a few times a month. Their share in the survey amounted to 9%. The people travelling once a day were the smallest group of the respondents with the share of only 6%.

In the last question of the survey, the respondents were asked to indicate their destination (*Figure 15*).

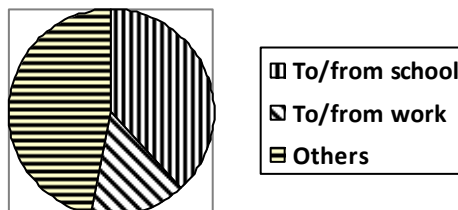


Figure 15. Destination of the respondents

Source: Own study based on the conducted research

The largest number of the responses, since as much as 47%, referred to the destination other than ‘to/from school or work’. On the other hand, the respondents indicating ‘to/from school’ amounted to 38% of those questioned. The respondents indicating ‘to/from work’ as their destination constituted a much smaller group. Their share in the research amounted only to 15%.

Assessment of the components of logistics customer service in terms of creating competitive advantage of the surveyed company

The conducted research allowed for determining the level of passenger satisfaction and identifying the elements of the transport process which affect the quality of customer service in the surveyed Przedsiębiorstwo Komunikacji Samochodowej.

The research was conducted on a group of 100 people using the passenger transport services of the investigated company. In that group, the majority was women, people aged 21-30 and the people using the passenger transport services of the surveyed company a few times a day.

An important factor affecting the competitiveness of the company is the satisfaction of its customers. The majority of the respondents indicated that they were satisfied with the offered passenger transport services.

The basic factor taken into account by people wishing to use passenger transport services of the specific carrier is the timetable of its buses. Each company dealing with such an activity faces the challenge to create such a network of communication links that, by means of appropriate frequency of buses, allows for

including the largest possible number of potential passengers and thus encourage them to use their offer.

The timetable of the surveyed company was assessed positively and the respondents were satisfied with the offered communication links and the frequency of buses. The situations of delays or premature departure of buses occur relatively rarely. Also the drivers' job is rated positively.

The respondents also indicated the elements negatively influencing the quality of the provided services.

The level of the bus ride comfort is an important factor affecting the decision whether the passenger will reuse the services of the investigated company. It was identified as average since most respondents rated it as 'high' and 'low'.

Enterprises wishing to effectively compete in the market must constantly monitor the quality of their services. The respondents indicated what actions must be undertaken in the investigated company to increase their quality. Most of all, more modern buses need to be purchased, passengers should be provided with Internet and Wi-Fi access and also appropriate temperature inside vehicles ought to be provided.

Another important factor affecting customer satisfaction is the relation of the ticket price to the quality of service. In the case of the surveyed company this relation is at a good level however, it should be considered that more than 20% of the respondents indicated its negative nature.

Another significant factor influencing the quality of the provided services is the qualifications and experience of workers. In terms of destination the respondents can be divided into two groups. The first one refers to the people whose destination is neither school nor work and the other one relates to school children. The investigated company should take into account the requirements of each of these groups. The respondents paid attention to the fact that the drivers did not react to loud behavior of young people as well as the drivers themselves listened to the radio too loud. Both factors can be really burdensome while travelling.

Conclusions

Creating competitive advantage in the realities of the 21st century requires enterprises to include increasingly sophisticated needs of their customers in their future goals. Satisfying them must be performed quickly and in a manner tailored properly to the specific requirements.

On the basis of the conducted research, it can be concluded that logistics customer service in the surveyed company is at a good level and its level of competitiveness is high. The majority of the responses obtained in the survey indicate that the customers of the investigated company are satisfied with the provided passenger transport services.

The surveyed company efficiently creates competitive advantage in the market it provides its services to. One of more important arguments can be the indication by nearly 75% of the respondent that they would make a decision on the use of the passenger transport services offered by the investigated company even if provided with an opportunity to use a different competitive means of transport.

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LOGISTYCZNA OBSŁUGA KLIENTA W ASPEKcie KSZTAŁTOWANIA PRZEWAGI KONKURENCYJNEJ WYBRANEGO PRZEDSIĘBIORSTWA KOMUNIKACJI SAMOCHODOWEJ (PKS)

Streszczenie: Odniesienie sukcesu na rynku jest niewątpliwie związane z osiągnięciem przez przedsiębiorstwo przewagi konkurencyjnej. Jest to możliwe jedynie w przypadku poprawnie zidentyfikowanych elementów stanowiących źródła przewagi konkurencyjnej. Proces ten istotnie wiąże się z koniecznością ciągłej rywalizacji przedsiębiorstwa o klienta. Dzisiejsze czasy wymuszają od firm, aby coraz szybciej i w coraz bardziej wyszukany sposób zaspokajały potrzeby konsumentów. W artykule przedstawiono związek oraz istotę logistycznej obsługi klienta i przewagi konkurencyjnej. Celem artykułu jest analiza i ocena logistycznej obsługi klienta w aspekcie tworzenia przewagi konkurencyjnej na przykładzie wybranego Przedsiębiorstwa Komunikacji Samochodowej (PKS) w zakresie transportu pasażerskiego.

Słowa kluczowe: logistyczna obsługa klienta, PKS, Przedsiębiorstwo Komunikacji Samochodowej, przewaga konkurencyjna



THE PROCESS OF DIGITAL TRANSFORMATION AS A CHALLENGE FOR COMPANIES

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Abstract: In order to improve the efficiency of business management, companies are increasingly using modern technologies. The necessity of using them forces changes in the environment, among which the first one comes these that determine the durability and profitability of customer relationships. The key objective of the article is to identify the place and importance of digitization in the process of creating customer relationships and identify the key barriers for digital transformation. As a thesis, it is assumed that the primary barrier for the advancement of digital transformation is the competency barrier. On the basis of literature studies and cited research reports, this thesis has been confirmed.

Keywords: business value, customer relationships, digitalization, digital intelligence, knowledge barrier

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Introduction

Changes occurring in the environment of the contemporary organizations are so dynamic and unpredictable that nowadays one does not only speak of “new competitive landscape” (Kaplan, Norton 2002, p. 22-23), but of the phenomenon of “new normality in the economy”, in which strong turbulence (Kotler, Caslione 2009, p. 21) and the necessity of competing in the so called “flat world” are becoming the norm (Fung, Fung, Wind 2008). When speaking of the changes in the environment, one cannot omit the growing demand barrier, as well as the issues related to: increasing consciousness of the customers, growth of the knowledge parity in making purchase decisions or the increase of the exchange clarity (Brzozowska, Szymczyk 2017). These factors result in the change of bargaining power of the participants of the market game in favor of the customer (Dobiegała-Korona, Doligarski 2010).

For the subjects, not only from the business sector, it means the necessity of, one hand, creating unique customer value while, on the other hand, minimizing the costs of his/her satisfaction. Meeting this challenge is linked to the necessity of acquiring and developing knowledge resource, the source of which can and should be the customers (Caputa 2015a, p. 141-150). Furthermore, in the world of “immediacy”, time becomes the key factor of competitive advantage. As a consequence, nowadays the following are becoming some of the main driving forces: computer, development of the internet and development of information and

computer technologies that make the flow and processing of information in real time possible.

The main goal of the goal of this work is to present the place and significance of digitization and digitalization in the process of creating relations with the customers as well as the identification of the degree of advancement of the process of digital transformation in practice along with the challenged arising from it. The realization of that goal was based on literature studies and reports from research conducted by the subjects from the business environment.

Digitization and digitalization – conceptual dilemmas

Both the terms of digitization as well as digitalization are relatively new concepts that appeared in common usage together with the widespread access and use of the Internet network as well as the development of information infrastructure and technologies that accompanied this phenomenon.

In the general terms, the concept of digitization is identified with the transformation of information coming from the objects of real (analog) world into their digital representation (Ober 2005). It does not, however, mean that this concept can be reduced to scanning. Digitization is a set of actions aiming at the processing of the analog resources into an equivalent and available digital resource. These activities can be ordered into a sequence of processes focused on: preparing, formatting, describing and sharing resources, with their final result being a digital (2D or 3D) copy that is available for the users through the Internet or by other channels for a long period of time. An integral element of the process identified in such a way are also the activities focusing on maintaining digital copies and metadata, backup copies and planning for the future (*Zalecenia dotyczące ...*, 2011, p. 9). In effect the term of digitization should be connected with the change of form and by that with “the transformation of a real, physical world, one or more of its components into a digital equivalent” (*Definicja cyfryzacji*, 2014). One should remember, however, that when following the change of form there is a change of content and the digital recording itself is the beginning of potentially infinite process of widening. In effect, the term of digitization is often identified with the concept of digitalization which is reflected not only in everyday use, but also in domestic and international publications (*Nowy leksykon PWN*, 1998, p. 14-19).

Nevertheless, number of authors point out a number of differences that exist in this area. Thus, we can speak of a narrow and wide meanings of this word. In the narrow approach digitization is the synonym of digitalization. The wide approach, however, connects it with the adaption and the increase of utilization of digital and computer technologies by the subjects from the public and business sectors, economies and countries etc. (Brennen, Kreiss 2014; Skowron-Grabowska et al. 2017).

In this approach the emphasis is placed not only on the digital technology but also on the possibilities of using it in various aspects of social and economic life. Therefore, in contrast to digitization, digitalization in the wide meaning of this word has a holistic dimension. It is a complex concept, that possesses the

characteristics of a doctrine, based on three mutually interconnected and occurring elements together: computerization, informatization and networking. Therefore, it is, as stated by J. Pieriegud “a constant process of convergence of the real and virtual world”, that becomes the main engine of innovation and changes in the majority of the sectors of the economy (Pieriegud 2016, p. 11).

Digitalization in creating customer relations – new business models

It cannot be disputed that digitalization is one of the most characteristic features of the contemporary economies, but also one of the most dynamic changes, the intensity of which is currently stimulated by such factors as: the Internet of things, ubiquitous communication, applications and services based on cloud computing, analytics of large data sets and large data operating as a service, automatization and robotization as well multichannel and omni-channel distribution models of products and services (Pieriegud 2016, p. 11; Kopishynska et al. 2016, p. 105-112). These factors cannot remain without any influence on the activity of subjects creating value (bidders), as well as the behavior of those who, thanks to acquiring it, can meet their multidimensional needs (customers). As a consequence, they determinate every relation, the input of which creates customer value and output customer value assessed from the perspective of achieving the objectives of the owner (Brzóska, Jelonek 2015).

Although in the subject literature customer value is defined in various ways (Caputa 2015a, p. 63-73; Kazarkiewicz 2007; Piercy 2003, p. 9-20), generally, there is consensus that it is a subjective and therefore a dynamic category. Because of it, it is not hard to prove that its identification requires systematic acquiring of data concerning customer needs, and also the tasks given to the product by the customer to be sold in the particular conditions of the exchange. These tasks can be of functional, emotional and social character. For this reason, customer value becomes inextricably tied not only to the value of the offer, described by such categories as: price, quality, functionality etc., but also by the values that remain in relation with the customer’s emotions, that are reflected in the value of the brand and relation, as perceived by the customer. These values are not created on the basis of one transaction or even a series on transactions but of maintained satisfaction, closeness, trust and customer engagement (Bruhn 2001, p. 58; Caputa 2015b, p. 20-25; Krafft 1999, p. 526; Storbacka, Stradvik, Grönroos 1994, p. 26; West, Ford, Ibrahim 2006, p. 18). Thus, it cannot be disputed that the identification of customer value needs to be of continuous character. At the same time it requires the identification and measurement of something, that despite not being of financial character (Brzozowska, Bubel, Kalinichenko, Nekrasenko 2017, p. 548-549) eventually through a complex change of cause and effect relationships decides about the capital supply of the subject.

Digitalization, based on computerization, informatization and networking makes it possible not only to acquire in real time the multidimensional data concerning customers, their expectations, behaviors and preferences, but also, in a relatively short time, to process enormous quantities of multidimensional data in a

way allowing, among others: detecting hidden factors determining value, identifying and analyzing cause and effect relationships, creating behavior models or detecting trends and presenting simulations concerning future behaviors and events (Kalinichenko, Havrysh, Perebyynis 2016, p. 389-395). This undoubtedly supports the bidders in recognizing and understanding customers and as a result, in the identification of values desired by the customer, the channels for providing them and the ways to communicate it. (Krawczyk-Sokołowska, Ziółkowska 2013, p. 14-19). The consequence of that is the possibility of designing such an architecture of actions and processes that secures effective resource allocation.

It remains in a direct relationship with providing excellent customer service and customer experience. It has special significance in, among others, e-commerce industry, the development of which is a derivative of the skill of meeting customer's needs. It requires knowing not only his/her preferences but also behaviors. As a result, the area of user experience is currently considered to be "the most important battlefield in trade" (Gartner, 2017). Chances for victory are on the side of the one, who: personalizes relationships, analyzes purchasing path and conducts extended trade which is impossible without the implementation and utilization of digital technologies.

However, it needs to be emphasized that the significance of digitalization in the process of creating value cannot be reduced only to creating databases or the phase of value creation for the customer and the process of its creation. Digitalization also includes robotization and automatization of actions, better ergonomics – ease and speed of access and propagation, possibility to receive and transfer data and information from many and to many subjects (Szwajca 2017). Thus, in the world of "immediacy", digitalization, by supporting creation, spreading and communicating the value offered without delays or even in advance, becomes a key factor of improving the effectiveness and efficiency of the value creation process.

It is also hard to neglect the significance of digitalization in the process of creating relationships based on cooperation and interaction, which secure a permanent flow of benefits. These relationships are based on a mutual flow of information, its coding, processing and utilization. Computerization, informatization and networking makes not only the information transfer itself possible but also the exchange of experience and hence creation of knowledge resources of all subjects taking part in it (Brzozowska, Gałych 2015, p. 21-22). In such a way it secures the inclusion of the customer in the process of creating value and generally makes it possible for everyone who has necessary qualifications to become an employee (Caputa 2016). The consequence of that is such a value for the customer that makes it possible to acquire customers in the global environment.

In the light of the arguments presented below it is not hard to prove that the digitalization, by supporting the process of customer communication, the course and organizations of operational processes in the areas in which the value is created, as well as the selection of target markets and customers, supports the execution of two classic strategies of enterprise operations, the development strategy aimed at profits increase and a cost strategy concentrated on cost reduction. However, these strategies, due to being based on digital transformation,

and therefore an organizational change of a special kind, based on the utilization of digital technologies in order to radically improve the efficiency or achievements of the organization, require the designing and implementation of new business models that: offer “special value” to each customer, “special” way of creating and providing the value offered, “special” way of communicating value on the market and “special way” of communicating with market participants. These models are based on different, often revolutionary schemes, the examples of which are presented in *Table 1*.

Table 1. Chosen examples of “revolutionary” business models

BUSINESS MODEL	ENTERPRISE	DESCRIPTION OF THE BUSINESS MODEL
Free Model	Google, Facebook, Snapchat	The end user has free access to the service. The operator plays the role of the service provider, but receives income from advertising and sales of information regarding preferences of the consumers that are the users of the free service.
Hipermarket	Amazon, Zalando, Coolblue	Enterprises operating in e-trade, offering a very wide assortment of goods and services, often providing products or service on an exclusivity basis.
Subscription model	Netflix, HelloFresh, Dollar Shave Club, Kindle, One	The user is paying a constant fee for the access to the offered product/service.
Freemium Model	Spotify, Dropbox, LinkedIn, Skype, The New York Times, Farmville	The product or service (most often software, computer game, internet service) is offered for free, however, the use of advanced functions or getting certain virtual goods requires a premium version to be purchased.
Market space	eBay, Alibaba, Friendsurance, priceline.com, Upwork	The enterprise provides a platform for transactions made by third parties.
Experience	Apple, Tesla, Disney World, Tomorrowland	Companies utilize the tendency of users to pay more, based on the previous experiences with using the products or the contact with the company.
Pyramid	Amazon, other e-shops	Companies generate a large share of their incomes through subjects cooperating with them and through sellers of other goods.
On Demand	Uber, Operator, Task-Rabbit	Companies offer products/service available for the users “immediately” in the moment of the demand being created.
Ecosystem	Apple, Google	Companies create a closed ecosystem of products and services, which forces the users purchase more products of the same company in the future.
Access over Ownership	Zipcar, ParkCirca, Peerby, Car2Shar	Users can use the service without the need to purchase the product which is utilized during the course of using the service.

Source: (Caudron, van Peteghem 2014. After: Pieriegud 2016, p. 19)

As it can be seen from the above, the enterprises utilizing new models offer various products, connecting various branches of industry in which they reach the customers through marketing omni-channels. Thus, they gain a possibility to: acquire customers on a global scale, create attitude and behaviors of the market game participants with the cooperation of virtual communities, or transferring and acquiring in real time information supporting the process of creating value which in a significant way allows turning the customer into a low-cost employee of the enterprise.

Achieving the aforementioned benefits requires strict integration of all business processes in the enterprise, among which those gain special significance that secure the creation and development of customer relationships. This statement is fully supported by the J. Konieczny's – Leader of Oracle Digital in Poland – opinion, who stated "digital strategies will succeed only when everything will be connected with each other by the way of a specially created "infoway". The integration of systems that are on the first line of contact with the customer (so called "front-end") and those working in the back (so called "back-up") is especially important. Such a connection makes it possible to modify the processes and business modes more easily, according to new, unexpected contacts of the customers" (*Transformacja cyfrowa ...*, 2017).

Digital transformation in corporate practice – competency barriers

Digital transformation, in its nature, is a response to challenges linked to a rapid growth of digital technologies. This transformation is based on four foundations indicated in *Figure 1*, which are its driving factors at the same time. Each of them grounds on a range of supporting technologies, determining their multi-dimensional utilization.

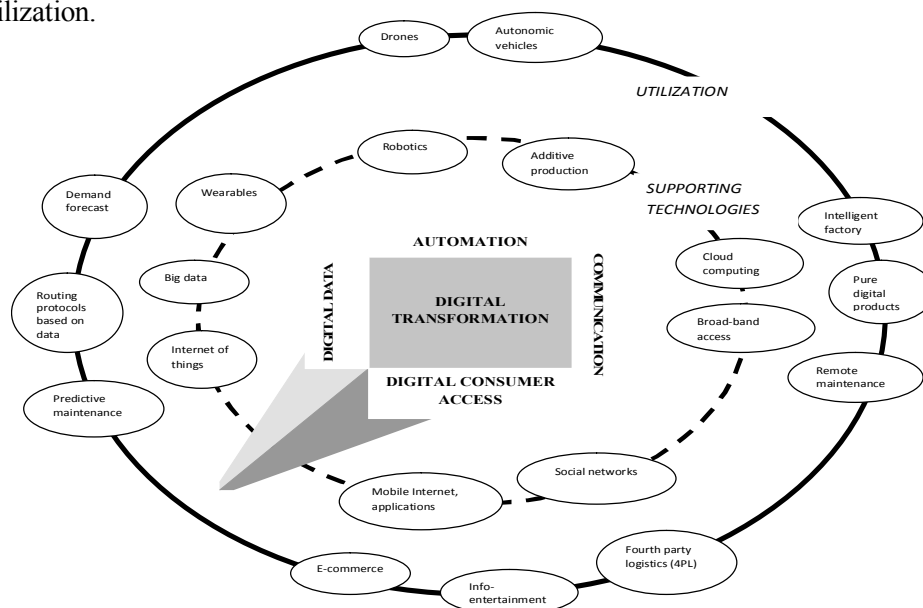


Figure 1. Factors driving digital transformation of industry

Source: (*The Digital Transformation ...*, 2015).

It should be emphasized that for the companies performing in such industries as: media and entertainment, financial services, telecommunication, new technologies or retail sales, digital transformation is not only a condition of more effective utilization of resources and creation of competitive advantage but also a condition of their survival.

The key significance of digital transformation for the development and survival of businesses is confirmed by a number of research, for example:

- research conducted in 2015 among the managers of higher level revealed that in the next few years digitalization in the sectors “driven by data” may oust 40% of companies that currently have a strong position in their industries (Pieriegud 2016, p. 14);
- research conducted by Dell Technologies showed that 78% of businesses think that start-ups from digital industry pose or will pose a threat for them in the future. In the aforementioned research, as much as 45% of respondents representing global corporations indicated that their market offer may turn out to be out of date in the nearest 3-5 years, due to increasing competition from start-ups that were established in the digital era ([http://www.virtual-it.pl/...](http://www.virtual-it.pl/));
- research conducted by Vanson Bourne, amongst the sample of 400 leaders of medium-size and large enterprises in 16 countries and 12 industries. The research demonstrated that as much as 52% of respondents experiences serious disturbances in their industries, caused by digital technologies and “Internet of everything”, furthermore, almost a half of them (48%) does not know how their industries are going to look like in three years. In result, for the greatest share of enterprises, digital transformation becomes a specific challenge, which despite providing some possibilities, still overwhelms, and is additionally connected with an increasing risk and uncertainty of the nearest future ([http://www.virtual-it.pl/...](http://www.virtual-it.pl/)).

In the light of presented research, digital transformation of a company is not only a necessity but also a condition for continuation and development. As a consequence, the businesses face a specific challenge of not just buying and implementing modern technologies, but mostly of their effective utilization.

Achievement of this objective is linked to the digital maturity of businesses (so called digital intelligence), which translates into the ability of organization to use digital technologies in a profitable way. Therefore, the following issues are interesting:

- what capacity is possessed by Polish enterprises,
- whether there are difference in that matter in comparison with foreign counterparts, and if so, then:
- what the basic barriers are for the increase of advancement level for digital transformation.

When answering to the first aforementioned question, one may refer to the conclusions coming from *Digital IQ Report*, which generally points to a fall of

confidence in digital capability of not only Polish enterprises¹. As it results from the report, only half of the respondents assessed digital intelligence of their companies as high or very high, what means a fall by 25% in comparison to year 2014/15 (PwC 2017).

Among the reasons for such state of things competency gap comes first. Its existence is indicated by accordingly, 69% of respondents in Poland and 63% in the world. It is worth noting that in the opinion of both distinguished respondent groups this gap will be increasing. In this case the number of indications is similar (38% Poland and 39% world).

The results of research presented in *Table 2* point to “digital lag” of Polish enterprises. It is especially visible in terms of such competencies as cyber security, significance of analytics in companies or consumer experiences.

Table 2. Digital competencies of enterprises in the light of research (in %)

Competencies	Competencies of key significance for the company			Well-developed competencies		
	World	Poland	Difference	World	Poland	Difference
<i>Cyber security and data protection</i>	83	58	25	64	56	8
<i>Data analysis</i>	82	67	15	59	51	8
<i>Implementation of new technology in business</i>	79	73	6	48	36	12
<i>Suitability assessment of emerging technologies</i>	78	67	11	53	40	13
<i>Designing of technological architecture</i>	78	64	14	58	51	7
<i>Customer experience in the development of customer-oriented solutions</i>	61	40	21	38	40	2

Source: Own work based on (PwC 2017)

Taking into account the significance of digital transformation for establishing, retaining and development of customer relationship, it is worth paying attention to the last of the aforementioned competency gap. It emerges on the one hand, caused by competencies concerning information gaining and utilization about the transactional customer behavior, on the other hand, by the transformation of knowledge gained from customer for customer, what negatively translates into to the process of creating both, market and resource customer potential, and what follows it, the value of the company itself (Caputa 2015a). In the area of well-developed competencies, the greatest differences concerned the competency assessment in terms of suitability assessment of emerging technologies and implementation of new technologies in business.

¹ This report summarizes the results of global research conducted by Oxford Economics, commissioned by PwC. 2216 respondents from 53 countries representing IT departments from various sectors took part in the survey.

However, it should be emphasized that over 29% of respondents from Poland points to a lack of competencies inside the company, and in case of foreign respondents such lack of competencies is indicated by every fifth interviewee (17%). A weaker internal competency of domestic enterprises could be improved by the use of external resources. According to the respondents, who highly assessed internal digital competencies of their companies, such activities were declared by 34% of respondents from Poland and 44% of foreign respondents. In result, foreign enterprises show a higher inclination to launching resource leverage, that is increasing own competencies with partner's competencies (Caputa 2003, p. 278). These activities, in the opinion of 42% of interviewees from abroad, allow the company not only to reduce costs, but also improve and facilitate the digital processes. In case of respondents from Poland it is only 25%.

Digital intelligence finds its expression also in the ability of proper designing and implementing of innovation processes as well as cost and effect assessment of the utilization of IT. Unfortunately, both in Poland (62%) and in the world (67%) more than a half of enterprises does not possess own teams dealing with technology exploration, and services of this type are commissioned outside. For this reason, it is difficult to be amazed with the fact that 54% of companies have a problem with the integration of innovation strategy with company strategy, what negatively translates into the process of value creation. It is not only about idle cash flow but also about chaos and ineffective use of time, being one of key resource of achieving competitive advantage in the era of strategic discontinuity. At the same time, the approach above may show a passive attitude of companies towards innovation, even despite the declaration by 71% of interviewees that in their enterprises a systemized approach to IT evaluation has been developed.

In this context it is worth paying attention to, identified in the course of research and presented in *Figure 2*, the three leading priorities in terms of conducting innovative activity, which confirm the aforementioned competency gap in both types of enterprises, domestic and foreign.

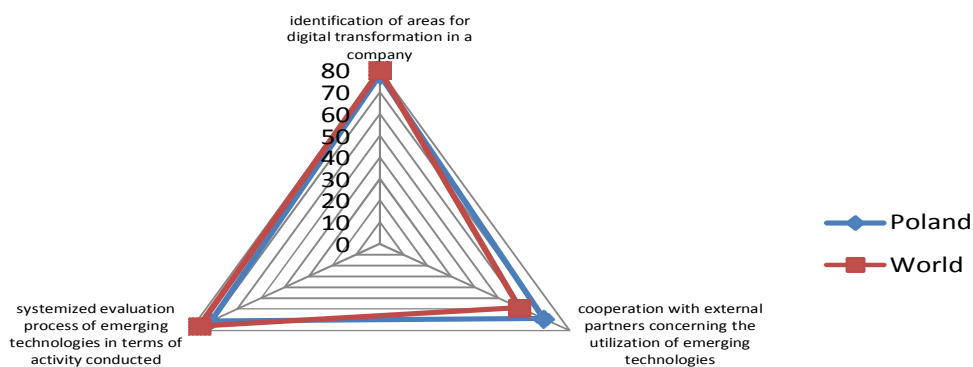


Figure 2. Priorities of conducting innovative activity in the light of research (% of indications)

Source: Own work based on (PwC 2017)

Its existence is also confirmed by the results of other research, including the research, mentioned before, conducted by Dell Technologies among the company customers. On their basis, bearing in mind the digital transformation indicator², the business structure was established, presented in *Figure 3*. A dominant share in this structure belongs to the enterprises named as “cautious” or “followers”. These subjects either gradually deal with digital transformation, developing plans and making investment with future in mind (cautious) or have only just begun making plans in that matter (followers).

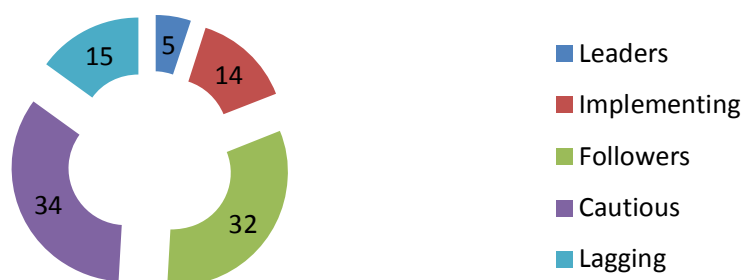


Figure 3. Degree of digital transformation advancement in the examined enterprises

Source: Own work based on Dell Technology (after: [http://www.virtual-it.pl/...](http://www.virtual-it.pl/))

Only 5% of the subjects were qualified to the leader group. Almost the same amount of companies is at the stage of plans execution or a lack of such plans, and what is connected, plans implementation or investment in this area. In result, most of the examined enterprises face the necessity of accelerating digital transformation.

Conclusions

In the light of the research results presented, digital transformation should be considered as the basic challenge that the enterprises have to face. It is not only a competitive factor, but more and more often the condition of establishing and developing customer relationship. This relationship, determining capital supply for the company, also drive its continuation and development (Caputa, Paździor, Krawczyk-Sokołowska 2017, p. 102-105). The research confirmed the thesis that the basic barrier of increasing the degree of digital transformation advancement, both in domestic and foreign enterprises, is competency gap. Nevertheless, it does not change the fact that the degree of digital transformation advancement in the foreign subjects is higher, what may be connected with a greater inclination and ability of utilizing the competencies of external partners.

² This indicator evaluates the business advancement in the area of digital transformation.

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PROCES TRANSFORMACJI CYFROWEJ WYZWANIEM DLA PRZEDSIĘBIORSTW

Streszczenie: Dążąc do poprawy efektywności gospodarowania, przedsiębiorstwa coraz częściej korzystają z nowoczesnych technologii. Konieczność ich wykorzystania wymuszają zmiany w otoczeniu, wśród których na plan pierwszy wysuwają się te, które determinują trwałość i rentowność relacji z klientem.

Zasadniczym celem artykułu jest wskazanie miejsca i znaczenia cyfryzacji w procesie kreowania relacji z klientami oraz identyfikacja kluczowych barier hamujących transformację cyfrową.

Jako tezę opracowania przyjęto, że podstawową barierą wzrostu stopnia zaawansowania transformacji cyfrowej jest bariera kompetencyjna. Na bazie studiów literaturowych oraz przytoczonych raportów z badań teza ta została udowodniona.

Słowa kluczowe: bariera kompetencji, cyfryzacja, inteligencja cyfrowa, relacje z klientami, wartość przedsiębiorstwa



WHAT MAKES A SUCCESSFUL PROJECT? – THE ROLE OF PROJECT PARTICIPANTS ACCORDING TO THE OPINION OF THE HUNGARIAN COMPANIES

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Abstract: The investments, embodied in projects are crucial in national economies tool. Investments are one of the main components of the gross domestic product, so they are the promoters of the growth. Unfortunately several projects have already failed at the beginning, while others have failed during the construction period. The success of the project contributed by many factors, among which are supporting and hindering ones. Based on a classical project triangle the key factors are needed to a successful project are time, cost and effectiveness. Among these factors the project participants are not shown, but they are there in all three dimensions. The Hungarian surveys show that nearly three-quarters of the projects fail, in which the planning, financing and management also play a role. The aim of this study is to measure the latter factor, depending on the role of project participants, without whom the success of a project cannot be carried out, and who functions as a key player in the light of the results of a quantitative research.

Keywords: project participants, investments, primary research, project success

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Literature review

Projects as investment actions are essential for the economy of a certain country and a region too. Investments, as the classic macroeconomic income formula² shows, are capable of substantially influencing the GDP rate both in a negative or a positive way. Enterprises are special factors of the economic growth, which they are able to affect significantly through their financing and investment activities. This is why it is imperative to discuss the financing and investment decisions of the enterprises together and consistently. As the previously mentioned income formula indicated, in addition to consumption, governmental purchases and income deriving from external relations, investments are also needed for the growth of the economy.

Prior to the crisis we had consumed on credit and we had invested in nearly every region of the world with the aid of credit, since the resources had been available without a limit and at a low price. Before the economic crisis erupted in 2008 the countries had tried to push the rate of their economic growth up, which

¹ Supported through the New National Excellence Program of the Ministry of Human Capacities.

² $Y = C + I + G + (Ex - Im)$

they had accomplished via the cheap loans accessible in masses (Csizsárik-Kocsir, Szilágyi 2016). Due to the credit-funded early consumption and investments the investment ratio in the countries of the European Union had been over 22%, which shrank strongly below 21% and then later below 20% as the result of the crisis. The downturn was detectable in every sector of the economy, as the diagram below shows.

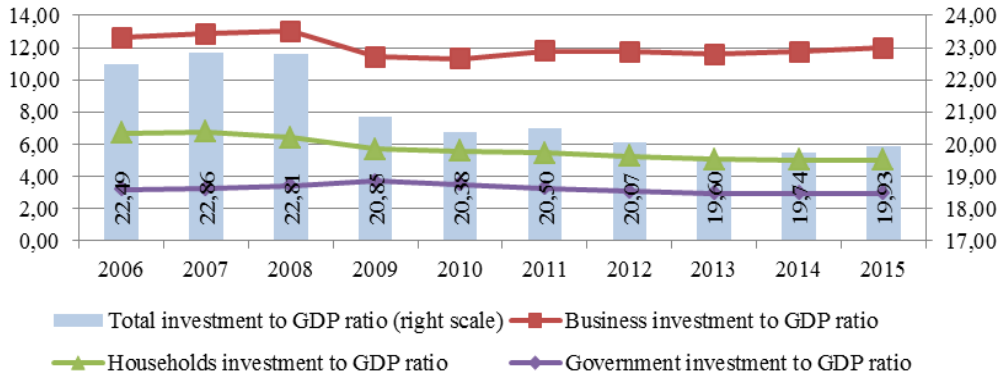


Figure 1. Investments in the countries of the European Union before and after the crisis

Source: Own compilation based on Eurostat, European Commission 2017

In order to increase the investment ratio we need projects, which are specific forms of investment actions. The projects always have a well-defined start date and end date, and they are always carried out to achieve some specific and usually unique goal. Consequently, a project differs from the normal corporate activities, because in this case we always have to face some new and unknown series of actions. However, this process is full of risks and uncertainties (Chapman 1998). These two concepts are often treated as synonyms, although they have different meanings, as it was expressed mathematically by Knight (Knight 1921) as well. In his opinion, we talk about risks when we know the probability of occurrence of a certain event, whereas it is an uncertainty if we don't know this probability.

Nevertheless, it has to be noted that it is almost completely impossible these days to make such a distinction, as the probabilities are hard to foresee, which is why these notions are used as synonyms after all. The main point of the risks can best be set out as factors that threaten the achievement of the goal or divert the desired outcome. According to Renn (Renn 1992), uncertainty is a condition for the risks, because the future is always unpredictable. Hillson (Hillson 2002) agreed that the risk is a presumption of an uncertain event, which can have a negative or a positive impact too. Bernstein (Bernstein 1998) also explained risks with the existence of uncertainty, which is down to the lack of and inaccuracy of information.

Numerous articles, studies and books deal with the risks of the projects. The risk of a project is basically the probability of some kind of danger materializing,

which will have a rather negative than positive effect on the goals of the project or on the organization as a whole. In accordance with the opinion of the PMI (PMI 2013), the organizations and stakeholders always sense and assess the risks that occur during a project. The attitude towards the risks is determined by the organization's risk appetite, tolerance and the size of its risk threshold that the organization still considers bearable. Many studies have tried to analyse and examine the risk predisposition and risk detection as well.

The Big Five Personality Model (extraversion, agreeableness, conscientiousness, neuroticism, openness to experience) – introduced by Zhao and Seibert (Zhao, Seibert 2006) – needs to be highlighted, on the basis of which Wang and his co-authors (Yan et al. 2016) wished to look into the relationships with the project risks. Certain factors are able to influence the attitude towards risks both in a positive and negative direction, as Ulbert and Csanaky (Ulbert, Csanaky 2004) noted too in connection with the positive illusions, which are usually related to the judgement of the abilities and skills of the individuals. These are relevant from the aspect of the project managers.

Based on some surveys, 70% of the projects fail due to inadequate planning. The most common mistakes are the underestimation of the budget and the insufficient management of risks. The failed projects will not be able to contribute to the increase of the investment ratio and to the promotion of the economic growth. Hence the failed projects will always appear as a loss or damage, for which the organization wasted the resources in vain (needlessly). These effects also show up at the level of the national economy as a loss in the form of lost growth.

Part of the risks derives from the complexity of the projects. With regard to the complexity of the projects, Geraldi, Maylor and Williams (Geraldi, Maylor, Williams 2001) named the following five dimensions: structural complexity, uncertainty, dynamic, pace – speed, and socio-political dimensions. Every one of them is a risk-generating factor that needs to be evaluated in the course of an exploratory analysis.

The risks are meant to be handled by the risk management of the project (PRM³), which is more and more considered to be a factor increasing the probability of the project's success (Olechowski et al. 2016), yet the usage of these techniques and tools are still rather occasional to the project managers (Raz, Michael 2002). Several techniques exist for the management of risks. Some of them can be eliminated by insurance, while others can be minimized or shared (Lewicki, McAllister, Bies 1998) by an appropriate calculation, like for example by NPV calculation (Paquin, Gauthier, Morin 2016) or by contracts (Adler, Pittz, Meredith 2016), but still there are factors that remain unmanageable. Fekete (Fekete 2009) mentions two levels of risk management:

- risk controlling, as a cause-specific measure (reducing the probability of occurrence, reducing the effect), and
- risk financing, as an effect-specific measure (insurances, contracts).

³ PRM = Project Risk Management

The companies have to create their action plan to manage risks in light of the above.

The risks can be very diverse, and there are several forms of their categorization. Renn (Renn 1998) claimed that there are technological risks created by the social environment, high-volume risks that cannot be controlled by individuals, monetary risks and risks voluntarily taken by individuals. Coenen (Coenen 2004) named five groups of risks: market risks (competition), operational risks (operation), financial risks (equity transactions, exchange rates, interest rates), environmental risks (legislation, business), and other risks (organizational structure, natural environment).

Material and method

The basis of the study is the primary research conducted in 2016, which has been carried out through a pre-tested and standardized questionnaire⁴ in Hungary. The research is still ongoing and the introduced results are only partial results, reflecting the opinion of 592 enterprises that have answered the questionnaire form. The questionnaire assessed the enterprises' point of view in three aspects: their financing, investment activity and project management. This essay is dealing with the evaluation of the results of the project part. The finalization of the questionnaire had been preceded by in-depth interviews, and then the questionnaire form was created by using the outcome of the qualitative research. The questionnaire contained only closed questions for the sake of the better assessment of the sample and the answers. There was an earlier round of the examination between 2013 and 2015, prior to the present form of the questionnaire, where the issue was assessed in the same thematic areas but with fewer questions. The sample chiefly consists of SMEs because of their weight and economic dominance. The questionnaire was filled by the enterprises completely anonymously, and their identity has not been identified in any way. Due to the segmentation of the sample, the research required only the company form, the scope of activities, the domestic property rates, and the main balance sheet and income data (net sales revenues, earnings after taxes, balance sheet total). The results are not considered representative, but they provide for the possibility of conducting and establishing a representative research at a later time as well. The sample introduced above was assessed with the help of the SPSS 19.0 and MS Excel 2010 programmes.

In the present study we examined the sample by number of employees and the sector. The composition of the sample is shown in the following table:

⁴ Hereby I would like to thank for the assistance of the students of Óbuda University, who contributed to the dissemination and filling of the questionnaires.

Table 1. The composition of the sample

Number of employees			Sector		
	db	%		db	%
below 50	478	80,7	primary	59	10,0
between 50-25	60	10,1	secondary	139	23,5
above 250	54	9,1	tertiary	394	66,6

Source: Own research, 2016, N = 592

Results

According to numerous experts, the success of a project depends on how well risks are managed. Besides financial resources, one of the greatest risk factors is represented by human resources. Although many emphasize the role of project leaders (Cassar, Martin 2016; Marnewick, Erasmus, Joseph 2016; etc.), yet we should not forget about the role of the project team and sponsors as well (Olsson, Berg-Johansen 2016; Zdonek, Podgórska, Hysa 2017; etc.).

Throughout the research I have been seeking for perceptions about the role of each specific player within a project (sponsor, creditor, project manager, project team, contractor, supplier, operator, adviser, controller and user). I have asked respondents who filled out the questionnaire to rate the players of projects on a Likert-scale from one to four based on their importance considering the success of the project, where one means the lowest level of significance, while four means the greatest level of importance. The below graph demonstrates the results:

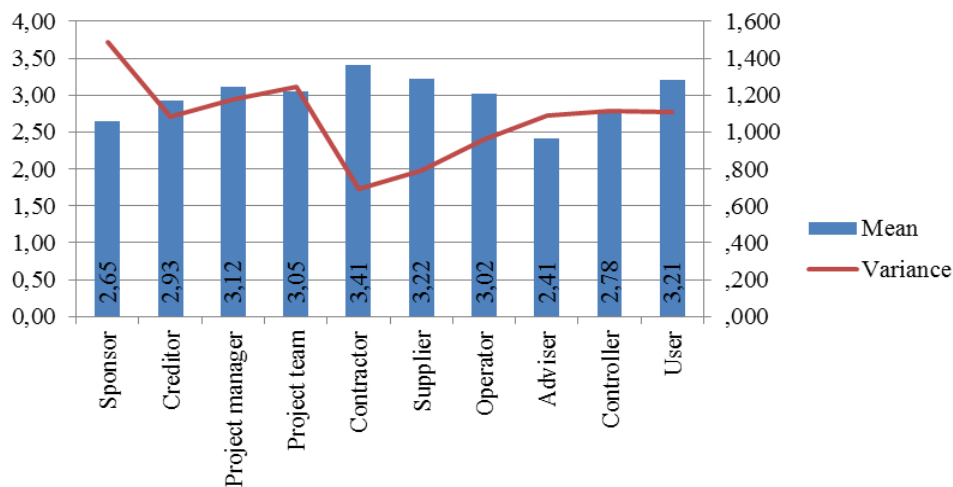


Figure 2. Appreciation of project participants in the sight of the success of a project

Source: Own research, 2016, N = 592

As it is revealed by the graph, respondents attributed the greatest role from the aspect of the project's success to the contractor, with a mean value of 3,41. It was followed by the role of suppliers, and users. As a surprise, project managers and the project team – the players considered to be the most important ones by professional literature – were only ranked the fourth and fifth places by respondents. They assigned the last but one position to the sponsor, with supervisors and controllers being one place ahead, and advisors to be the least important. It is interesting from the point of view of the project's success, because without the money of the sponsor, there would be no project, and without the help of the project manager and the project team, it would be impossible to realize the project. From the aspect of a project's success, contractors and suppliers only come next, though considering long-term success, they are of the utmost significance.

Now I shall present the results based on the segmentation criteria of the respondent enterprises, as demonstrated on the graphs.

Table 2. The opinions (means) according to the number of employees

	Under 50	Between 50-250	Above 250
Sponsor	2,59	2,70	3,20
Creditor	2,83	3,22	3,44
Project manager	3,05	3,52	3,28
Project team	2,96	3,45	3,41
Contractor	3,39	3,47	3,48
Supplier	3,24	3,20	3,07
Operator	3,03	3,08	2,85
Adviser	2,37	2,57	2,63
Controller	2,74	3,15	2,74
User	3,26	3,27	2,70

Source: Own research, 2016, N = 592

The table reveals that according to enterprises with less than 50 employees, the three most important players of a project from the aspect of the project's success, are in order the contractor, the user and the supplier. The perception of middle sized enterprises is completely different. They believe that the project manager is the most important one, followed by the contractor, and then the project team in the order of importance. It means that the importance of the project team and the project manager becomes relevant for middle sized enterprises. As to the largest businesses who have more than 250 employees, they rank the contractor to be the most important one, followed by the creditor and the project team. The project manager is not assigned a special significance here, however the creditor, as the organization necessary for the financing of the project appears here. The largest enterprises are able to realize greater investments on account of their size, which

require external sources besides their capital. If the bank does not grant the credit required for the desired project, it is already doomed.

Small sized enterprises ranked the role of advisors, sponsors and controllers to the end of the list. Medium sized businesses included operators here as well, though they believe controllers to be more important than the other three players. According to the largest enterprises, the least important players from the aspect of a project's success are advisors, controllers, and users. Which means that the largest companies fail to acknowledge users as important players of the project, since on account of the size of their projects, they regard the opinion of users to be negligible.

Afterwards, I was interested in whether I can find any kind of relation between the evaluation of players and the segmentation criteria of respondents, which is the size of the enterprise. For this purpose I have used Pearson's test, which only reveals correlations under the value of 0,05. The results are presented in the below table.

Table 3. The *Pearsons* values according to the number of employees

	Chi-square values
Sponsor	0,0093
Creditor	0,0021
Project manager	0,1021
Project team	0,0098
Contractor	0,1732
Supplier	0,0063
Operator	0,0007
Adviser	0,2364
Controller	0,0029
User	0,0000

Source: Own research, 2016, N = 592

Based on the Pearson's test, there are a number of cases which show a correlation between the size of the enterprise and the evaluation of players. From the aspect of a project's success, the perception of sponsors, creditors, the team, suppliers, operators, controllers and users are influenced by the size of the enterprise, which is clearly confirmed by the mean values presented above.

Now I shall present the opinion of enterprises based on the sector which they belong to according to the type of their activities. The results are demonstrated in the table.

Table 4. The opinions (means) according to the sector

	Primary	Secondary	Tertiary
Sponsor	2,49	2,68	2,67
Creditor	2,75	2,89	2,97
Project manager	2,78	3,06	3,19
Project team	2,90	2,92	3,12
Contractor	3,37	3,45	3,40
Supplier	3,37	3,30	3,17
Operator	3,07	3,09	2,99
Adviser	2,31	2,32	2,46
Controller	2,78	2,67	2,82
User	3,15	3,25	3,20

Source: Own research, 2016, N = 592

In line with the opinions of enterprises of the primary sector, contractors and suppliers were selected as the most important players from the aspect of success. They both have a mean value of 3.37. They are followed by the user, and the operator. In case of enterprises in the secondary sector, again the contractor is ranked the highest, then comes the supplier and the user. The players at the first three places are almost the same as in the previous case. However, tertiary enterprises believe that the role of project managers are also important, though only at the third place. It is remarkable that enterprises from the secondary and tertiary sector consider supervisors, controllers, sponsors and advisors to be the least important, yet without sponsors, the project cannot even be launched, while controllers contribute to the fact that the project is completed in the quality and condition required for its milestones. In case of primary enterprises, creditors are ranked lower than sponsors, which means that for companies operating in the primary sector, financing is less important, since they mainly complete their projects financed from their own resources.

Afterwards I have again analysed the statistical correlation between the players of a project and the sector with the help of the Pearson's test, which is presented in the table below.

Table 5. The Pearson's values according to the sector

	Chi-square values
Sponsor	0,0050
Creditor	0,5230
Project manager	0,0011
Project team	0,1332
Contractor	0,0494
Supplier	0,0640
Operator	0,1062
Adviser	0,7469
Controller	0,6815
User	0,9413

Source: Own research, 2016, N = 592

The table shows that in this case, the number of actual correlations regarding the perception of players are much lower compared to the previous case, which means that the criteria of belonging to a sector does not influence the evaluation of players.

Conclusions

Overall, based on the results of the research it is obvious that despite the general assumption, the project manager and the project team are not as important as they claim to be by professional literature. It is also interesting to see that the greatest risk factor, which is financing is also considered to be unimportant according to respondents, meaning that the success of a project is not defined by the financing provided by the sponsor or creditor. On the contrary, the emphasis is placed on the actual implementation, the contractor and the supplier. It can be explained by the fact that the technical failures caused by the negligence of contractors make the physical use and long-term viability of a project more difficult or even inhibit it. A poorly executed project consumes a great amount of resources, which is not provisioned for by the players of the project when it is launched. By examining the results of the research it becomes apparent that the careful selection of the contractor and the supplier vouches for the efficiency of a project. A reliable contractor paired with a reliable supplier are able to determine the success of a project. A good project manager and the related project team can only further guarantee this success. However, we should not forget about those who provide the necessary financial background as well, which means that the desire of creditors and sponsors should also be taken into account. The fact that controllers are not regarded to be significant for the success of a project might be problematic. Whereas, controllers are the actors who – in possession of all the necessary

information – are able to make alerts about potential errors, delays, which can be revised, corrected in due course, before the delivery of the project. The results of the research reveal that a slight change should be applied in the basic way of project thinking. The general criticism which claims that one third of projects are not implemented in time, within the previously specified budget with the desired level of efficiency, which means that they are not able to meet the three classic requirements of a project, is entirely confirmed by the research. In the future it is worth placing a greater focus on players who are neglected in the replies of respondents. Therefore besides financing, controlling and feedback are also important, in order to be able to learn from these in the future, and to avoid making the mistakes which already foredoom a project to failure.

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CO DECYDUJE O SUKCESIE PROJEKTU? – ROLA UCZESTNIKÓW PROJEKTÓW WEDŁUG OPINII WĘGIERSKICH SPÓŁEK

Streszczenie: Inwestycje są jednym z głównych elementów wzrostu gospodarczego państwa i jednocześnie decydującym czynnikiem jego rozwoju. Wiele przedsięwzięć jest przerywanych już na samym wstępie procesu planowania inwestycji. Metodologia przedstawiona w artykule pokazuje strategię efektywnego wspomagania przebiegu projektu, związanego z inwestycją, tj. jego realizację w założonym czasie i przy planowanych kosztach. Głównym celem artykułu jest zatem określenie uwarunkowań decydujących o powodzeniu w realizacji zamierzeń inwestycyjnych.

Słowa kluczowe: inwestycje, sprawność inwestycyjna



A VERIFICATION OF ADVANTAGES AND DISADVANTAGES IN PARTNERSHIP RELATIONS

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Abstract: In the paper there were taken into consideration the potential advantages and disadvantages that are implications of cooperation in distribution channel. The particular attention was focused on partnerships and there was made a research on the clothing market. There was made survey research among representative group of enterprises of clothing industry. On that base there were indicated differences between effects that occurred in both: contractual cooperation and partner relationships.

Keywords: cooperation, partnership relations, distribution channels

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Introduction

Today's market demands of enterprises create well-functioning whole supply chains make it impossible for even the largest companies to prosper independently. It is not possible to a single company to compete effectively with the extended enterprise (supply chain), which through enhanced cooperation, achieves synergistic effects that the entities cooperating only in the transactional sphere are not able to achieve (Rutkowski (red.) 2005, p. 42; Bubel 2016, p. 66). Companies become innovative not only through their own organizational capacity, but also through external contacts with their counterparts - partners. Actions to improve communication, collaboration and coordination among the various actors in the network are a prerequisite for creating and developing new products and services (Górka 2015, p. 28). Companies that are innovative in the market, or want to be innovative, need to their development a cooperation with the environment. (Seroka-Stolka et al. 2017, p. 133). The purpose of the work was to verify the occurrence of positive and negative effects, which are most often seen in the partnership. It is noted that both the main benefits and the risks, and what follows - the main negative effects of establishing partnerships in distribution channels are the same for businesses of different industries. That is the reason why the author addresses this topic to the clothing industry.

The benefits of partnerships in distribution channels of clothing sector

In the literature of the subject there can be found many information about the effects that companies may achieve by working with other entities in distribution

channels. It is typical that cooperation based on partnerships or relationships similar to the partnership brings benefits to both parties of the market exchange - to the recipients and to the suppliers. On the perspective of recipients, this cooperation reduces uncertainty about costs of materials/products, quality, delivery periods and response rates. From the perspective of suppliers, this type of cooperation brings following benefits (Ciesielski, Długosz (red.) 2010, p. 51-52): reducing the uncertainty of the suppliers connected with market risk, understanding the needs of end-users and product specifications. On the other hand, there can be indicated also advantages from cooperation too (Jelonek 2012, p. 39-53).

The other researchers (Maloni, Benton 1997, p. 419-429) have pointed out a long time ago, that the biggest benefits of supplier and customer collaboration are: to provide higher quality products and lower transaction costs through economies of scale, reduced administration and formalization, combined efforts, launching tasks integration and coordination, and quantitative discounts. The authors have also stressed that companies will be encouraged to cooperate, if the market in which they operate is characterized by stability and balance of supply and demand (Maloni, Benton 1997, p. 419-429).

Moreover, the partnership allows (Ciesielski, Długosz (red.) 2010, p. 52; Nowakowska-Grunt, Mazur 2016, p. 43):

1. Reducing the uncertainty of both parties' efforts to increase communicability, distribution of reward and operational risk, reduction of opportunism, common goals and expectations,
2. Achieving savings from economies of scale by procurement, production, transport and administration costs, reducing change costs, integrating processes, technology and increasing resource use,
3. Increased responsiveness through joint development of both product and process, faster access to markets, and improved time cycles.

Similar benefits are mentioned by others (Harrison, van Hoek 2010, p. 354), stating that the main benefits of partnering systems are savings, resulting from the limited need for negotiating and concluding separate contracts, and controlling the reliability of the supplier, also in the sphere of supply quality. In addition, this arrangement affects not only the distribution channel, but also the entire supply chain. Partners coordinating their operations, achieve strategic advantages such as shortening production cycles, completing orders and procurements, and creating a stronger foundation for long-term investment. On the other hand, as the benefits of partnerships, where partners use electronic communication, the authors indicate: greater product availability for the consumer (which has a direct impact on increased sales of the product) increased service levels in the distribution channel, reduced costs by reducing inventory and waste, better integration of interorganizational processes (simplification, acceleration, standardization, increased predictability), and greater involvement of partners in achieving mutually agreed goals and plans for the entire channel (Harrison, van Hoek 2010, p. 339).

M. Stajniak describes in greater detail the benefits of cooperation. As positive changes occurring in the supply chain through partnership, he lists (Stajniak et al. 2007, p. 151):

- significant reduction of delivery time,
- reducing disruptions in delivery,
- improvement of quality,
- decrease in supply chain costs,
- lowering the level of damage,
- shortening of cash flow,
- ability to plan and implement strategies with partners in foreign markets,
- the ability to shaping competitive prices.

There are also advantages that occur in an economic and financial sphere (Mesjasz-Lech 2016, p. 121-132).

From the point of view of the clothing industry, the most important benefits of working with partners in distribution channels might be:

- overcoming the constraints connected with realization of effective, wide-ranging marketing or physical activities for distribution of companies products, which is especially important for the small apparel businesses that constitute the largest group of entities in the market,
- time savings, due to the limited need for negotiation and signing the contract - the clothing products even in the same collection may differ sometimes in the use of extras, which undoubtedly affects their price, but the cooperating companies already have a certain "base" of the contract, which allows them to focus on the details of the order,
- greater product availability (on store shelves), which has a direct impact on increased sales of goods, and at the same time reducing costs by constraining inventory and waste levels - this is possible due to the proper distribution of goods in a given shop network,
- increase of the level of service in the distribution channel. This is possible due to the better exchange of information between its participants acting on the basis of partnership,
- better realization (it also means a significant reduction in delivery time and reduction in supply disruptions) by subcontracting processes directly related to garment manufacturing to partners in distribution channels such as logistic centers, which realize a significant part of the tasks, i.e. labeling, ironing, sales and others,
- acquiring valuable commercial, technical and administrative information from partners,
- the ability to shaping competitive prices through more efficient logistic handling and lowering the level of damage.

Obviously, not all of these benefits may occur, some of which may appear over longer distance of time than others, and their range may vary widely.

Risks in partnerships in the context of clothing distribution channels

Nevertheless, the results achieved by partnering are not identical for each partner agreement, and even for individual partners in the same network. They depend on many external and internal factors which influence companies

undertaking this cooperation. Additionally, in a dynamic environment, changing some of the terms and motives of partners can make the relationship ineffective even for both parties. Another threat to partnerships is the situation of strong dependence of companies, as in the case of supply chains. At a time when high levels of interdependence arise from the market position of partners, product uniqueness, high cost of changing the supplier / customer or the lack of other suppliers offering the same or substitutable solutions, and these factors affect only one partner, it falls into a certain type a trap associated with the crushing tender power of the partner (Witkowski 2003, p. 39).

An establishing relationships with strong relations between partners also carries many risks. The following threats are addressed to companies that cooperate on a partnership basis (Harrison, van Hoek 2010, p. 354):

- the inability to estimate accurately the value of elements of a qualitative nature, eg. design work,
- in the decision-making process leading to the choice of a partner, it is necessary to gather exhaustive, very detailed information about him,
- the risk of disclosure to foreign entities, including competing companies, confidential information,
- the danger of limiting providers to several major or even one.

It is worth noting that in every distribution channel there is a leader who connects the other participants and imposes some of their solutions in some way. Is it possible to talk about partnerships, when a leader in chain may require more from other partners, than others from the leader? All types of partnership are a manifestation of competition with other market participants not belonging to a given arrangement, but also between partners in one network, to a certain extent, occurs rivalry. In particular, partnership based on the exchange of knowledge, technology or knowledge of the market creates a negotiating struggle (Ciesielski, Długosz (red.) 2010, p. 54). Obtaining a certain range of information from a partner also makes it necessary to share some or all of the knowledge or skills with partners. Therefore, partnerships also have some limitations, especially for non-leaders or entities which haven't got strong position in the channel. The most important ones seem to be (Rutkowski (red.) 2005, p. 270-274):

- the lack of possibility of concluding contracts with other partners, ie exclusivity of the action for the partner in the distribution channel; This barrier, however, is compensated by the advantage that partners can create with already a regular consumer/partner,
- some dependence on the partner and his financial and technological results,
- uneven power of partners, which makes weaker partners surrendered to the stronger.

As noted (Benton, Maloni 2005, p. 3-6), the distribution of power in the distribution channel is not evenly and it depends on the position of the partners. In the case of the relationship between the manufacturer and the supplier, the economic strength is more on the side of the manufacturer, but between the manufacturer and the dealer is more uniform. It is obvious that the constant

maintenance of too strong power by one distribution partners creates and enhances a barrier that prevents from achieving the integration based on the principle of win-win (Ciesielski, Długosz (red.) 2010, p. 55). On the other hand, vertical integration of marketing systems (VMSs) and vertical integration of partners can be beneficial, for example by taking over some of the features of distribution channel participants.

In addition, some channel distributors strive for greater independence, which although in some cases is justified, the implementation of this process can endanger coordination that ensures overall realization, efficiency, development and, over a longer period of time, even the survival of a given channel. That is why all participants in the distribution network must work together to produce a comprehensive quality of distribution and high quality customer service that becomes a product delivered throughout the channel (Stern, El-Ansary, Coughlan 2002, p. 50).

However, the risk of conflicts between partners in distribution channels cannot be excluded. The clothing industry is no different. It is noted that there are some problems in the long run of the partnership. For example, a garment manufacturer who entrusts an outside company with the design or development of a product is released from some of the investment burdens. Thus, cooperation with such an external company leads to greater engagement in the creation of new products, which results in better use of its ability to reduce costs and improve products. As a result, however, the base company – the manufacturer – is at greater risk because of the dependence in the field of design work from the supplier, which under pressure from the competition may be inclined to opportunistic behavior. Effective and continuous communication between partners is a necessary factor in the quality of cooperation.

Effects of partnership in the light of the research

On the basis of the survey, there were verified whether positive or negative effects appearing in the distribution channels of the researched enterprises. In addition, the results obtained from all entities were compared with the results gathered from the entities cooperating under the partnership principles. More than 100 entities belonging to the clothing industry, having their location in the Silesian province, participated in the survey. The selection of subjects for the study was made by means of random sampling and the verification of the representativeness of the sample was carried out by the use of a median test.

The following statistical hypotheses were used to examine the representativeness of the sample:

H_0 – *The sample of garment enterprises in Silesian Region has a random character,*
on the alternative hypothesis:

H_1 – *The sample of garment enterprises in Silesian Region is not random.*

Because of the condition that $n_1 > 20$ or $n_2 > 20$, the empirical value of the Z statistic calculated according to the pattern given above was 1.64. Because for significance level $\alpha = 0,05$ the critical value u_α for a two-sided test, read from the normal distribution table is 1.96, therefore: ($U = 1,64 < 1,96 = U_\alpha$), there is no reason to reject the hypothesis H_0 , that the sample is random.

In the survey there were posted the questions concerning the occurrence of various types of effects (both positive and negative) that were observed among the surveyed enterprises. There were a total of sixteen effects and there was space for additional effects that were not included in the questionnaire. Respondents were able to select responses from 0-3, where 0 meant no effect, 1 – low intensity effect, 2 – moderate effect, and 3 – observed strong effect.

Due to the volumetric framework of the present study, there were analyzed only selected effects. However, there is made the distinction between the results obtained from the population and the results obtained from those which have partnerships. The observed benefits were: reducing the risk of activity (*Figure 4, Figure 10*), reducing the number of stocks in the surveyed companies and their distribution channels (*Figure 5, Figure 11*), improving brand recognition (*Figure 6, Figure 12*). Negative effects of the company are: dependence on the partner (*Figure 1, Figure 7*), increased risk of disclosure of important strategic information to competing companies (*Figure 2, Figure 8*) and limitation of contractual freedom with other partners (*Figure 3, Figure 9*).

The most commonly indicated effect by the surveyed enterprises, was the reduction of business risk – this situation occurred in 80% of the surveyed entities and in all which cooperate on the basis of the partnership. Moreover, in 50% of the respondents, the effect was moderately significant and among the companies cooperating in partnerships it was 68%. However, only 6% of respondents indicated that the magnitude of the reduction in business risk was high and the percentage of partners was 10%.

In turn, the responses to improving brand recognition among all respondents and partnerships were significantly different. This effect was not reported in only 3% of the partners, while the percentage of companies which haven't got partnerships and which reported no effect was 26%.

The effect of reducing inventory in the company and distribution channels occurred in 72% of the total surveyed companies, but a large majority (69%) indicated a weak and moderate effect. Quite similar results were noted in this regard among companies cooperating on a partnership basis. In this part of the study group the effect was 81% and 74% defined its strength as weak or moderate.

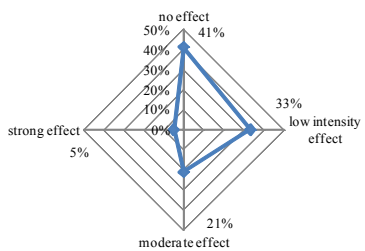


Figure 1. Dependence on a partner

Source: Own study

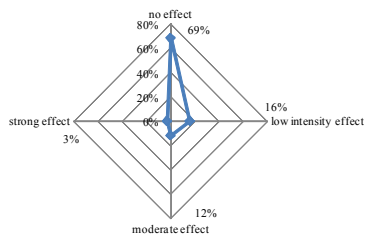


Figure 2. Increase the risk of revealing important strategic information to competitors

Source: Own study

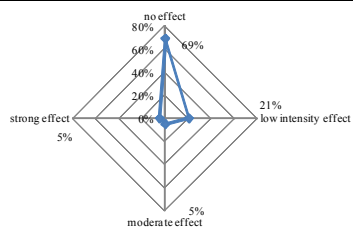


Figure 3. The limitation of freedom for making contract with other partners

Source: Own study

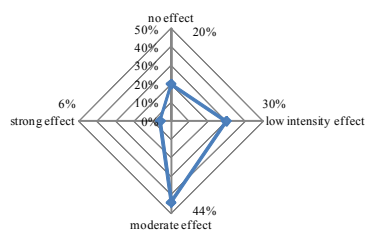


Figure 4. The reduce of business risk

Source: Own study

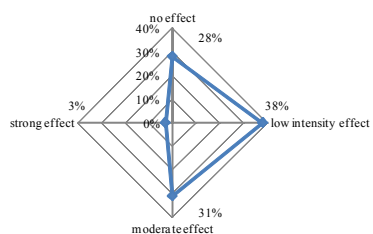


Figure 5. The reduction of inventory in the enterprise and distribution channels

Source: Own study

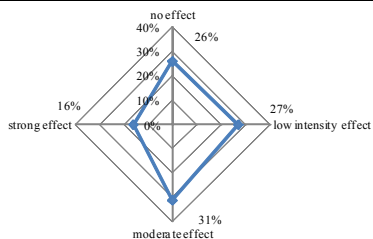


Figure 6. Improved brand recognition

Source: Own study

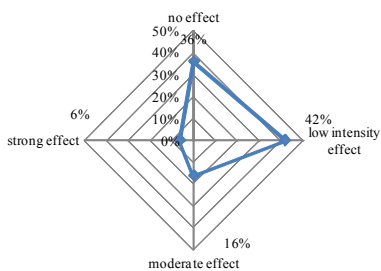


Figure 7. Dependence on a partner in partnership

Source: Own study

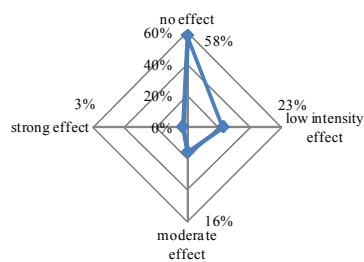


Figure 8. Increase the risk of revealing important strategic information to competitors in partnership

Source: Own study

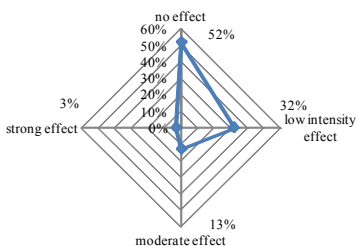


Figure 9. The limitation of freedom for making contract with other partners in partnership

Source: Own study

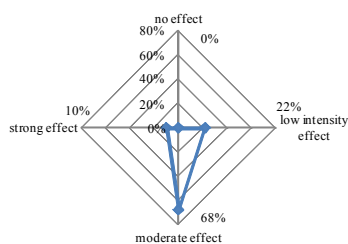


Figure 10. The reduce of business risk in partnership

Source: Own study

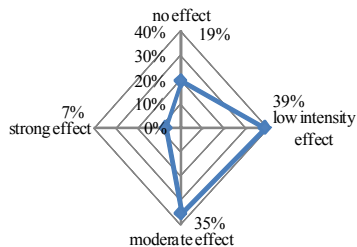


Figure 11. The reduction of inventory in the enterprise and distribution channels in partnership

Source: Own study

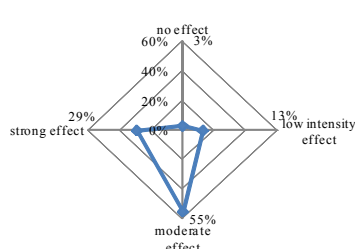


Figure 12. Improved brand recognition in partnership

Source: Own study

Considering the negative effects of partners' interaction in distribution channels, it is important that they did not occur in the majority of the population in question or have occurred but to a very small extent. For example, the effect of partner dependence has been observed by 59% of all respondents, and 33% indicated a weak effect of this effect. On the other hand, 64% of companies with partnerships reported that effect didn't occur, and 42% indicated that its strength was small.

In turn, 69% of the surveyed entities did not notice the increase of risk of disclosing relevant information to competitors, while the percentage of non-growth-enhancing companies was down by a few percentage points and amounted to 58%.

The threat of restricting the freedom of contract with other entities did not occur in 69% of the respondents. The percentage of companies cooperating in partnerships was much lower and amounted to 52%, but this is more than half of the respondents. Moreover, 32% of these companies indicated that this effect was minor.

Conclusions

The issue of cooperative effects reported by companies in distribution channels is very complex. Existence of specific effects depends on a number of factors, such as the type of relationship, the type of entity with whom the business cooperates, the scope of cooperation and other aspects. In the literature you can find many descriptions of the effects of cooperation, including partnerships, which may appear at different levels of the supply chain. Some of them were presented in the theoretical part of this paper. In order to confirm the literature studies, a survey was conducted, and some of effects were presented in this article. The differences in the indications of all companies and the indications of companies cooperating on a partnership basis are important issues for gaining certain benefits or increasing risks. It has been proven that there are indeed such differences and in some cases they are significant. One example is the reduction in the risk of activity that occurred in 80% of the total population. However, among the cooperating companies in the distribution channels, this effect was observed in all respondents. On the basis of the above, it is considered that the purpose of the work has been achieved.

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WERYFIKACJA KORZYŚCI I ZAGROŻEŃ W RELACJACH PARTNERSKICH

Streszczenie: W artykule poruszono tematykę potencjalnych korzyści i zagrożeń wynikających z podejmowania współpracy w kanałach dystrybucji. Szczególną uwagę skupiono na relacjach partnerskich, a problematykę odniesiono do konkretnej branży – odzieżowej. Zaprezentowano wyniki badań ankietowych przeprowadzonych na reprezentatywnej grupie przedsiębiorstw przemysłu odzieżowego i wykazano różnice w osiągniętych efektach ze współpracy, tzw. kontraktowej oraz partnerskiej.

Słowa kluczowe: współpraca, relacje partnerskie, kanały dystrybucji



POSSIBILITIES OF SHAPING WASTE MANAGEMENT IN POLAND IN CONNECTION WITH THE IMPLEMENTATION OF INCINERATION PROCESSES OF THE OVERSIZE FRACTION

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Abstract: The effects related to production and consumption lead to the production of significant amounts of waste. According to statistics, in Poland each of us is responsible for producing 338 kilograms of litter annually. The most popular method of waste management is landfilling due to the fact that sorting waste which may be reused is currently being promoted. However, we are not able to sort all kinds of waste into those which could be recycled later, hence the need for the construction of incineration plants that will allow a thermal decomposition of waste. The most important purpose of building an incinerator is also to minimize the landfill of waste, and then to adapt the management of the municipal waste in Poland to the European Union's waste management requirements. Therefore, in order to meet the restrictions in this area, this paper analyzes the functioning of the waste incineration plant, taking into account the processes of thermal treatment of the oversize fraction in the country, and it also shows a number of benefits arising from the compliance with requirements in line with the objectives of the 2008/98/EC Directive of the European Parliament.

Keywords: incineration plants, oversize fraction, municipal solid waste, waste incineration

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Introduction

Waste management is a difficult and at the same time superior environmental and economic problem. It is therefore important to create a system aimed at supporting measures to reduce the amount of waste produced and to manage it properly. An overriding legal act which systematizes the problem of waste is the Act on waste of 14 December 2012 (Rozporządzenie Ministra Środowiska z dnia 8 czerwca 2016 r. ..., item 21). Waste prevention, disposal or recovery, as well as the reduction of waste and its negative impact on the environment are of utmost importance. The Act sets out the principles of waste management in an environmentally responsible manner and in accordance with the principle of sustainable development as well as ensuring the protection of human health and life. Over the last few years it has been noted that waste management has become a major priority in the framework of activities for the environmental protection. Having joined the EU, Poland has faced many difficulties connected

with strict requirements of the directives of environmental protection. Waste management projects should primarily involve the implementation of new systems of organizational solutions that guarantee proper management of waste streams. Another issue is the modification of waste legislation and investment in the creation of the necessary technical capacity for waste management. To a large extent, research and development should also be increased to minimize the amount of waste that is emerging. Today's economic and consumer conditions affect the amount of waste produced (*Figure 1*). Due to the restrictions imposed by the legislation of the European Union, this waste must be properly treated and disposed of (Brendzel-Skowera, Puto 2012, p. 104; Kadłubek 2016, p. 407; Jeswani, Azapagic 2016, p. 346-363). Along with the technological progress and developments in many areas of life, there have been numerous problems with waste management. An important aspect of waste management is also the ability to manage it in a variety of processes, including among other things its storage, recycling and incineration. Collecting waste has led to an increase in the amount of necessary landfills and other waste disposal facilities. This has contributed to a considerable deterioration in the sanitary and ecological situation. The European Union's environmental policy in terms of waste management is implemented on account of the strictly defined actions aiming at the implementation of effective waste management, including for example limiting landfills and using waste as natural resources and fuels. The basic legal regulation that determines the above-mentioned activities is the Directive 2008/98/EC of the European Parliament and of the Council, which lays down appropriate waste management practices and objectives in order to reduce the negative impact on the environment and human health (Directive 2008/98/EC ..., Article 4 „Waste Hierarchy”). Therefore Poland, as a member state of the EU, is also obliged to implement the legal provisions within the aforementioned scope (The Act of 14 December 2012 on waste, the Act of 25 January 2013), which assume the greatest possible use in the recovery and recycling processes as well as the safe neutralization of residue, while preserving environmental safety and cost-effectiveness that are accepted by the society (Jaglarz, Generowicz 2015, p. 154-165; Seroka-Stolka, Nowakowska-Grunt, p. 366-371; Mesjasz-Lech 2013).

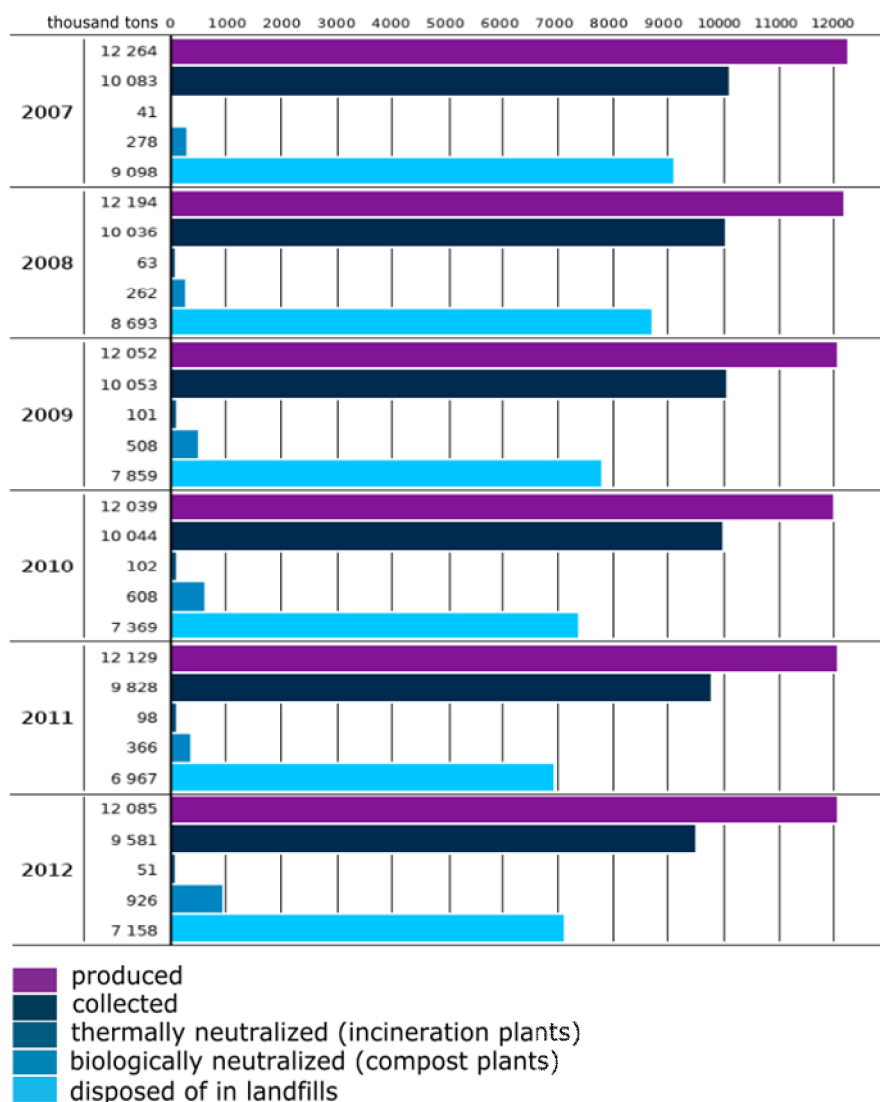


Figure 1. The amount of municipal waste produced in Poland

Source: (Styś, Foks 2014, p. 72)

Managing waste by means of incineration is more and more frequently observed. Incineration is a waste disposal method which takes place in specially designed appliances. Thermal conversion of waste occurs in the temperature between 650 and 1100°C and can be carried out in grate systems, rotary kilns or fluidized furnaces. However, the main disadvantages of the method are, among others, low efficiency of recovering electricity, generating by-products of combustion as well as installation and equipment costs (Toruński 2010, p. 31-47). A significant development of this waste disposal method took place in the 1960s as

a consequence of adopting in the EU strategies of waste management and some directives on waste disposal (1999/31/EC). As a result of this strategy, the amount of waste disposed was reduced and the number of incineration plants as well as the percentage of the incinerated waste were considerably increased in the EU countries. As the statistical data in 1990 show, about 30 million Mg of it was incinerated, whereas in 2000 it was more than 50 million Mg, and in 2007 about 62 million Mg (Wielgosiński 2010, p. 79-94). Progress in building incinerators in Poland is unfortunately insufficient and requires a distinct series of actions to meet the standards of the European Union Law and to equal other EU countries (Figure 2). Poland is at one of the last places in the ranking of the Member States of the European Union when it comes to the utilization of municipal waste by heat treatment (Pająk 2010, p. 137-146; Stenis 2005, p. 364).

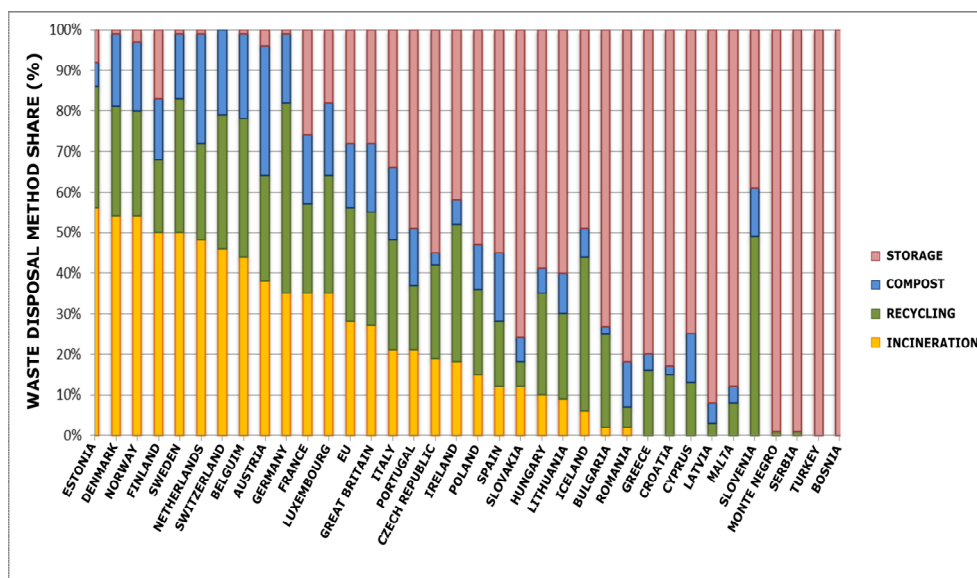


Figure 2. Participation of individual technologies of municipal waste management in selected European countries in 2014

Source: (Ziaja 2016, p. 4)

Thermal treatment processes of the oversize fraction

A research has indicated that the thermal utilization of the oversize fraction significantly reduces the size of a landfill site, as opposed to the method of waste disposal. The waste that goes to the installation of the thermal utilization of the oversize fraction is sieved on sieves. This is the first stage in which fractions, i.e. oversize and undersize ones are generated. The oversize fraction is subjected to a sorting process in the pig iron, which is then subject to recycling. Alternative fuel (RDF) is produced from residual materials. The thermal disposal of waste can be carried out in waste incineration plants and in power boilers (Strzelczyk, Wawszczak 2009). The energy generated as a result of the incineration of

municipal waste may be classified as the so-called green energy. The operation data of the installation of the mechanical-biological treatment (MBT) indicates that the oversize fraction called RDF or pre-RDF is around 40% of the initial mass of waste put into the system, which means that we can have up to 4 million Mg of calorific fraction which is separated from the municipal waste, of a net calorific value of 13-18 MJ/kg (Rozporządzenie Ministra Środowiska z dnia 8 czerwca 2016 r. ...). However, RDF is waste which cannot be stored, so that it must be incinerated. The incineration of RDF is not currently cost-effective due to the need to rebuild the system to meet the formal and legal requirements of the incineration process. It will be more profitable to build specially adapted installations. An example of the problem can be the construction of a thermal waste treatment plant in Olsztyn. In the initial stage, there were plans to build a plant of a capacity of about 100 thousand Mg/year. However, the city authorities resigned from the construction of the incinerator for the construction of a combustion plant of a capacity of about 130 thousand Mg/year. However, during the approval of the EU project there was a problem which raised the question of what should be done with 50 thousand of Mg of RDF per year. So it was decided to build an RDF combustion plant of a capacity of about 50 thousand Mg/year. Yet, at the design stage it was decided that the combustion plant would still take waste from other MBT plants in the voivodeship, and its capacity would be raised to about 100 thousand Mg/year (Wielgosiński, Namiecińska 2016, p. 11-20).

We distinguish two essential technological solutions to improve the quality of fuels obtained from waste. The first one, the aforementioned mechanical-biological treatment (MBT) is based on selecting raw materials of high calorific value, whereas the second one, connected with waste processing, is biodrying. High quality RDF fuels are obtained from materials of high calorific value, and therefore they must be characterized by reduced humidity and high heat of combustion. Therefore, the quality of fuels can be significantly improved by various technological solutions e.g. additional drying of waste in order to increase its calorific value. The biodrying technology is more and more frequently used for the mechanical and biological treatment of waste. It has a number of conveniences, including the possibility of obtaining a greater amount of fuel from waste which, after initial grinding, is subjected to drying in closed reactors. The material is then sorted into light and heavy fractions. Biodrying is thus mainly based on removing moisture from waste. Energy obtained from biochemical processes occurring in waste is helpful in this process. In companies using the MBT technology, it is based mainly on the biostabilization of waste fuel, which is separated from the coarse oversize fraction (> 100 mm or > 80 mm). This fraction contains large amounts of combustible components of high calorific value. Components that can be extracted for the production of fuel might also come from the middle fraction. This fraction, however, will require drying in order to increase its calorific value (den Boer 2013).

The results of the study show that meeting the process requirements in power boilers is not easy and requires separate analysis each time. Particularly the condition of keeping waste at a given temperature for 2 seconds might be difficult

to achieve with low-emission combustion with lower temperatures in boiler furnaces, especially fluidized ones. Also, load changes may lower the flue gas temperature or reduce their time at a given temperature (*Figure 3*).

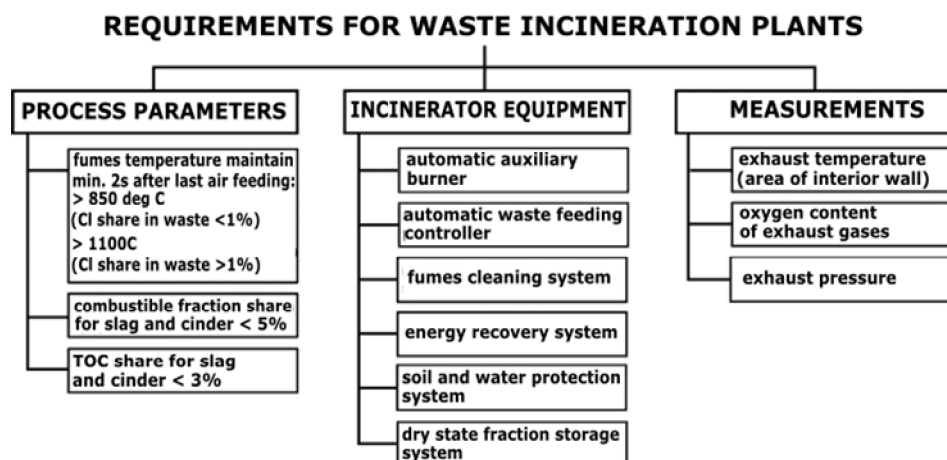


Figure 3. Requirements for waste incineration plants

Source: (Kotlicki, Wawszczak 2011, p. 160)

Economic and territorial conditions for the construction of an incineration plant

Waste management, and in particular the waste incineration method has been perceived in a negative way for many years, because it is difficult to obtain social acceptance for the aforementioned method of waste disposal. Although in many countries of the European Union thermal methods of municipal waste management account for about 30-60% of all the used methods of management in terms of tonnage, yet still in many countries, including Poland in particular, waste incineration raises many concerns and becomes a field of open conflicts between local governments and groups of residents, and as a result local governments often abandon this method of waste management (Wielgosiński 2010, p. 80; Miezah et al. 2015, p. 15-27). It is not without significance for social acceptance and it seems that it is not unjustified for the inhabitants of the areas where waste incineration plants are planned to be afraid of the negative impact of those installations on the health of people who live nearby municipal waste incinerators as well as the workers of those plants. Although an estimated analysis of chemical hazards emitted by municipal waste incineration plants, carried out against the background of valid values of permissible concentrations, indicates no significant health risk, yet the conclusions coming from the detailed study are not so optimistic. Blood and urine tests of the employees of municipal waste incineration plants as well as people living near those plants have indicated an exposure to various organic and inorganic substances (Starek 2004, p. 24-26). Results of the research conducted in the Netherlands indicate in exposed persons an increase in average concentrations

of heptachloro- and octachlorodibenzodioxin as well as hexachloro- and heptachlorodibenzofuran in the blood of the workers of municipal waste incinerators in relation to those who live nearby but do not work in the incineration plant (van der Hazel, Frankort 1996, p. 119-121). On the other hand, some German studies have shown that in case of workers who directly operate waste incineration furnaces, the concentrations of lead, cadmium and toluene in the blood and arsenic and tetrachlorophenols in the urine were considerably higher than in other employees of the plant, but did not exceed the limits of biological concentrations in Germany (Wrbitzky et al. 1995, p. 13-21; Seroka-Stolka 2014, p. 302-309). In general – according to A. Starek – the findings of studies carried out in a few European countries indicate the existence of occupational and environmental exposure to many toxic substances emitted by municipal waste incineration plants. At the same time, he points out the risk that the use of municipal waste incinerators of older generations brings with it (Starek 2004, p. 25). The development of the thermal method of municipal waste management, however, opens up optimistic perspectives concerning the potential environmental and occupational harmfulness of the operating municipal waste incineration plants. The directions for modernization of plants predict an increase in their efficiency, reducing the level of exhaust emissions, including substances such as nitrogen oxides (Rizzon 2016, p. 39; Gonzalez-Benito, Gonzalez-Benito 2006, p. 87-102).

The primary aim of the construction of an incinerator is to reduce the mass and volume of waste. Good practices from other EU countries show many benefits from waste incineration, as it is an indispensable component of the waste management system. In Poland there are 6 waste incineration plants (operating or scheduled for operation), among others in Bydgoszcz, Białystok, Cracow, Konin and Poznan, and at the end of 2017 it is planned to start the operation of a new plant in Szczecin (*Figure 4*).

CITY	TOTAL BUILDING COST OF INCINERATOR (NETTO PLN)	INCINERATOR PRODUCTIVITY (THOUSAND TONS)	EXPENDITURE (PLN/T)
BIAŁYSTOK	OK. 333 MLN	120	2 775
BYDGOSZCZ	OK. 426 MLN	180	2 367
KONIN	296 MLN	94	3 149
KRAKÓW	OK. 673 MLN	220	3 059
POZNAŃ	725 MLN	210	3 452
SZCZECIN	OK. 580 MLN	150	3 867
AVARAGE (ROUNDED)			
	505 MLN	162	3 111

Figure 4. Productivity of waste incineration plants in Poland

Source: (Kinitz 2014)

Currently, there are trends in the country to build regional municipal waste treatment installations, and more and more municipalities and counties are planning to have their own installation. It is important, however, to demand that the new incineration plants are designed for the utilization of the RDF fraction. At present, only incineration plants in Szczecin and Gdansk were designed under the possibility of the technological utilization of RDF (Wielgosiński 2011, p. 55; Nowakowska-Grunt 2014, p. 789-795). This is directly connected with the cost of the waste incineration process, which in most countries of the European Union amounts to from 60 to 120 EUR / 1 Mg, in Poland about 280 zloty / 1 Mg (Wielgosiński, Namiecińska 2016, p. 20). It follows from the data on the estimated amount of waste utilization planned for the years 2016-2020 that in order to obtain greater profitability and effectiveness of waste management, another 5 waste incineration plants and about 12 combustion plants of alternative fuel produced from RDF waste should be implemented in the country. The most modern municipal waste incinerators, due to the use of technologically advanced systems of gas purification, as well as the appropriate management of secondary waste allow their mass to be reduced to about 8% of the original mass. As a consequence, the area to be developed into landfill sites is reduced. Among the significant benefits coming from the implementation of the method of waste disposal in the form of incineration is a substantial reduction of organic waste, which directly affects an increase in the greenhouse effect. In addition, it is worth mentioning that waste incineration protects people and the environment from the ingress of large amounts of toxins leached from waste by rainwater (downpours, floods etc.). Another important benefit of waste incineration is its energy properties. Storage, as well as composting, is a huge loss of energy properties of waste, since from burning 1Mg of waste we may recover as much as 500 kW of energy (Wielgosiński, Namiecińska 2016, p. 20). The major problems which plants have to face are those related to the management of the energy fraction obtained from waste. In case of incinerators, the main problem is its small amount, since they are hard to access or not available in most regions. Transport charges and charges for giving the energy fraction to the incineration plant are also a problem. Therefore, in the near future plants will have to choose between the production of a high RDF / pre-RDF calorific value or the recovery of all raw materials, as it is impossible to produce high-energy coal and conduct recovery at a high level from the same stream. It is also worth mentioning that the Scandinavian market, where technologies of thermal treatment of waste are highly developed, is becoming a big chance for production plants located particularly in the north of the country. That is why the aforementioned market shows a great need for the acquisition of the energy fraction for its own incineration plants, which are often the only source of heat and energy for the city. On the other hand, Polish law still requires the fulfillment of numerous standards and formalities in particular bank guarantees connected with the cross-border transport of waste, as well as the costs that charge the shipper of the batch. Thus, the overriding objective is to solve the problem of the fraction of energy through cooperation with incineration plants, cement works and also foreign markets. The best solution would also be to expand incinerators

beside production plants, or special zones of waste management, thanks to which energy waste could supply the regions with electricity and heat (Spodzieja 2013).

Conclusions

To summarize the above considerations, it should be noted that the main lines of activity in the sphere of waste management were defined by the countries of the European Union many years ago. The primary and main goal is to reduce the number of landfills and to maximize the use of waste in the recycling of raw materials and materials for energy production (Starostka-Patyk, Grabara 2010, p. 16). One of the main priorities in the country should be to build a waste management system in line with the requirements imposed by the community of the European Union, also largely based on the thermal waste disposal. A significant improvement in the situation can be noted, yet investments related to the purchase or implementation of original installations for the incineration of the oversize fraction are still needed. One of the main obstacles to the development of the aforementioned waste incineration technology is also the so-called resistance of the society, associated with the conviction that waste incineration is a technology which emits harmful pollution. However, in view of the increase in the requirements resulting from Poland's membership to the European Union, as well as the emergence of a growing problem with the acquisition and management of areas intended for landfill sites, it seems that changes in waste management in terms of its incineration at a level assumed by the Directive 2008/98/EC are inevitable. The first changes in the national waste management have already been implemented by the so-called garbage revolution, however, there is still a big problem of burning garbage in unsuitable home appliances and illegal landfills in uninhabited areas (Ulfik, Nowak 2014, p. 1043). Therefore, it can be stated that incineration is an extremely important part of the waste management system, but we should remember that waste management is mostly based on the preparation of raw materials for reuse (recycling), whereas in the second place, technologies that dispose of waste but allow for energy recovery (incineration) are used.

The superior and prospective effect of building incineration plants and implementing incineration is above all adjusting the waste management system in Poland to the requirements of the EU. Waste incineration should, however, be carried out in technologies that are particularly stringent from the point of view of possible health risks, both these of a professional nature, concerning employees who operate incinerators, as well as environmental risks related to the inhabitants of the areas nearby incineration plants.

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MOŻLIWOŚCI KSZTAŁTOWANIA ZARZĄDZANIA GOSPODARKĄ ODPADAMI W POLSCE ZWIĄZANE Z REALIZACJĄ PROCESÓW SPALANIA FRAKCJI NADSIKOWEJ

Streszczenie: Efekty związane z produkcją i konsumpcją prowadzą do generowania znaczących ilości odpadów. Według danych statystycznych w Polsce każda osoba rocznie produkuje 338 kilogramów śmieci. Najpopularniejszą metodą zagospodarowania odpadów jest ich składowanie, ponieważ obecnie propaguje się segregację odpadów, które mogą zostać ponownie wykorzystane. Natomiast nie wszystkie odpady jesteśmy w stanie posegregować na takie, które w późniejszym czasie mogą zostać poddane recyklingowi, w wyniku czego występuje zapotrzebowanie na budowę spalarni odpadów pozwalających na termiczne likwidowanie odpadów. Najważniejszym celem budowy spalarni jest również zminimalizowanie składowania odpadów, a co za tym idzie – dostosowania gospodarki odpadami komunalnymi w Polsce do wymogów określonych przez Unię Europejską odnoszących się do zagospodarowania odpadów. Dlatego też, w celu sprostania restrykcjom w tym zakresie, w artykule dokonano analizy funkcjonowania spalarni odpadów z uwzględnieniem procesów termicznej utylizacji frakcji nadsitowej w kraju, jak również ukazano szereg korzyści wynikających z realizacji wymogów na poziomie zgodnym z założeniami dyrektywy Parlamentu Europejskiego 2008/98/WE.

Słowa kluczowe: spalarnie, frakcja nadsitowa, odpady komunalne, spalanie odpadów



ABOUT ORGANIC FARMING AND PRODUCTION IN THE WORLD AND IN HUNGARY

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Abstract: Organic farming is an important form of sustainable agriculture. Unlike integrated production, it does not use chemicals and artificial fertilizers during production. In the markets of developed countries, where the environment and health remain important for consumers, it reaches 3-4% of the market for food. It accounts for 5% of the production area. The world's largest crops are located in Europe and Australia. It is very important to know how much consumers are aware of the benefits of organic products and their environmental impact.

Keywords: organic products, market food, environmental, sustainable agriculture

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Material and methodology

Without this, it is only a luxury item that is the product of this product range. If you know the benefits of the consumer, you can decide whether you want to, or not, have the opportunity to consume such products. That is important in terms of management of a company focused on food production, which means they should inform fully about the quality and features of products. Such flow of information is one of the most important aspects of progressive globalisation processes, the companies should follow (Grabowska 2015). Food sector has become a competitive activity for enterprises oriented on foreign markets. Therefore, it is also for them to take into account the concept of Corporate Social Responsibility (CSR) in the process of the decision – making and organisational methods in production. The concept of CSR included in the management of the company helps to bond the entity with the consumers, and this in case of organic food production may be essential in terms of effecting marketing (Skowron-Grabowska, Tomski, Dunay, Illes 2016). In case of production of ecological, organic food, such responsibility of business is very important its products one supposed not only to satisfy the consumers, but also should build the trust towards the company (Fiedor 2016). Another important aspect is whether there are such products on the market and their prices can be paid. Many people even mention the mistrust of producers and products. Unfortunately, surveys show that this is very important in the Hungarian markets, but it also has an impact on international markets.

I used the domestic and international literature of recent years to write, but it was also my own research. In addition to a questionnaire survey by consumers, deep interviews with producers were also given. Based on these lessons learned, we have analyzed changes in recent years to find the underlying causes.

My hypotheses are the following:

- H1 – In the past decade, consumption of organic food in the domestic food consumption has not increased in quantity or turnover.
- H2 – One of the main causes of the downturn is the decline in household spending on food, with particular reference to the prices of organic products. That is, in terms of household income / consumer price, organic products are in a worse position.
- H3 – Another major obstacle to the procurement of domestic organic products is the scarcity, time and distance of purchasing opportunities, especially in rural areas.
- H4 – Another important cause of low consumption is mistrust and related ignorance. Awareness could improve the consumption of this product range.

Introduction

In the literature, one can notice that agricultural activity in terms of management of agricultural holdings is based on the concept of integrating management and information flow in order to increase economic of profits and development of the food sector (Brzozowska, Galych 2015). Approximately 20 years ago, the growth of organic farming was significant. Then, according to several authors and surveys, it seemed that, besides significant traffic growth and production growth, this alternative farming method has taken a significant part in the agri-food trade and its related food trade. Despite this great expectation, it did not happen. More to say, it only took place in a few countries. From the side of production, in the countries with large free pastures (Argentina, China, Australia), there has been great gains in sales, while in the developed countries with more knowledgeable and prosperous purchasing layers.

End-of-year 2015 figures are the most recent in the world. According to these, 50.9 million hectares of organic farming were cultivated worldwide. This means 6.5 million hectares increase compared to the previous year and 20.7 million hectares compared to 2005 figures. Based on continent-sharing, we can see that the largest increase was in Australia and Oceania and it was followed by Europe's growth of 1 million hectares. Australia has achieved this large growth, involving 97% of organic areas, with large-scale pastures. Significant land area growth of 17% was found in free pastures, which make up 2/3 of the organic areas. So, not a high-tech horticulture or cereal production is a major part of the area, but the easy-to-expand, accessible, migratory pastures. The proportion of areas is 20% of all organic areas, typically with rice growing, green fodder, oil seeds and cotton, and seed production. The share of the permanent crop is 4 million hectares, accounting for 8% of the total area. It includes coffee, olive oil, walnuts, grapes and tropical fruits. Australia and Oceania has almost half of the world's organic

rated areas, while Europe is one quarter and Latin America with 13%. The size of the wilderness areas amounts to 39.7 million hectares. This means that these areas may not be owned by the farmer, but are typically in the hands of a forestry, and the collection and collection of crops (eg mushrooms, forest berries, raisins, etc.) sell or process and so on. This activity is typically a way of earning income for the poorer countries. For these people, their own land is impossible to own in many cases, but owners of large land or forest areas contribute to the exercise of this activity, they can offer herbs and forest crops.

The number of producers reached 2.4 million in 2015. Producers typically come from Asia, Africa and South America. This also indicates that Africa and Asia have smaller plant typically, and South American producers do not have large areas on average, apart from livestock farming. Not surprisingly, most organic farmers came from these continents. India (585,000), Ethiopia (203,000), Mexico (200,000) are counted as leaders. Compared to the previous year, there was a 7% increase in the number of growers, which numbered more than 160,000 plants. It is typical that only a quarter of the territorial growth, but 89% of the producer increase is affected by the developing countries and their respective markets. That is, these producers can sell their products on a non-domestic market but are typically exported and the developed markets and consumers can buy them (Willer, Lernoud (eds.) 2017).

The world market

(This chapter is based on (Willer, Lernoud (eds.) 2017). If a part has different source I mark it separately).

In 2015, organic food and beverage sales amounted to \$ 81.6 billion in global markets. Not surprisingly, North America and Europe accounted for 90% of this. So, production is scattered across the globe, while consumption is concentrated on two continents. The other is that the number of consumers in these countries is not large, that is, the solvency of the narrow layer and the change in their consumer preference affects demand and supply. If we look at the country's turnover, we can see that the United States has a turnover of 35.8 billion euros, followed by Germany (8.6 billion euros) and France (5.5 billion euros). The European Union's turnover is below the US's total turnover, but it is still significant, as it accounts for 35.1% of the world's total organic turnover by EUR 27.1 billion. China is next with its 4.7 billion euros turnover. It is also worth examining the per capita consumption. It shows what countries are concentrated on consumption. In this indicator, we are not examining the countries with the highest consumption in the absolute value but the magnitude of individual consumption. We have more than € 170 average personal consumption per year in Switzerland, Denmark, Luxembourg and Sweden. In these countries, the market share of organic products is well above the 7% in the world. 8.4% in Denmark and 7.7% in Switzerland, for example.

North America has the largest organic product market in the world. With an annual turnover of 43.3 billion dollars (39.03 billion euros). The United States is the largest market for which the market for organic products accounts for up to 5% of total food turnover. Indeed, in the category of fresh vegetables, fruits reach 10%

of organic food. This is followed by the turnover of dairy products, with a similar percentage, of which milk and yogurt are the leading products. As domestic supply does not reach demand levels, organic products are imported from almost all continents. Only vegetables and fruits can satisfy demand, and for all other products the import is decisive. At the same time, both the US and Canada have appeared in international organic trade, typically with EU, Swiss and Far Eastern exports. Major commercial units are characterized by their own branded products in the organic product market.

In Europe, the organic product range was EUR 31.1 billion (EUR 28.03 billion). Typically, Germany, France, Italy and Switzerland have the highest turnover, but Denmark has the largest market share, with 8.4% of organic food being harvested. Europe is also characterized by the fact that its largest retail company stands out with its own branded organic products with its own label. For example, Dennree has more than 200 units in Germany and Austria, or Biocoop with approximately 400 stores in France, but 300 Collobora B'io units in Italy, while many large chain stores have opened an organic supermarket such as REWE or Auchan.

Looking at other continents and regions, we can see that the Chinese organic market has a major breakthrough due to not too high level of food safety and their scandals. Since then, for some basic foodstuffs, organic certification is indispensable. For example, the role of children and baby foods is decisive.

Let's compare the organic and the fair trade world market. Total turnover was \$ 7.3 billion. In order to combine organic with fair trade, we use the average annual rate of the European Central Bank, which is 1,1095 (EUR/USD) in 2015. Thus, the fair market value in euros is EUR 6.58 billion. We can see that the market of organic products has been more than 12 times the fair trade market, it is a market with a larger turnover. It is based on other principles and shows a special value when a product follows both principles, but the pursuit of health in this case means a stronger market than generosity and morality. It is also understandable if we accept some of the contents of the Maslow's need pyramid, since the need for health is more fundamental than morality (Warمیńska 2017).

It can be seen that the markets of organic products are developing very dynamically, and we can see that this development seems to be unbroken. Both product range and demand are expanding from year to year. According to some visions, by 2030, 50% of the European land will be guided by the principles of health, environmental protection, care and integrity. For this, dynamic growth indicators need to be kept in mind. This is still realistically feasible. At the same time, we can also see that one of the sources of danger is that this will not happen if Europe misses the possibility of bringing it closer together and eliminating the gap between supply and demand over the longer term. That is, supply is not able to catch up. This is partly political, partly economic.

The markets of organic products in the developed parts of the world are constantly growing and developing in Europe. To what extent is variable. For example, retail sales grew twice in Sweden (45%) or France (10%); but in Belgium (3.8%) or in the UK (4%), growth was below the average in 2014. There is also a

large spread among EU Member States as regards per capita consumption. Slovakia and Bulgaria have the worst ratios but Denmark and Luxembourg are leading.

At present, the following trends are observed in EU organic products markets.

- Dynamically strengthening retail markets. This market is growing steadily every year in Europe. It accounts for 3-4% of all food consumption today.
- Consumers spend more and more on organic food in absolute terms. For example, between 2005. and 2014. this increase was 110% and from EUR 22.4 (2005) to EUR 47.4 (2014) on average per person. During this time period, all food and non-alcoholic beverages consumed by households remained virtually constant, rising by only 13%.
- Some premium organic products have achieved more than the average market share in their product categories. Organic eggs have 11-22% share in Austria, Belgium, Finland, France, Germany and the Netherlands.
- Milk products have a 5-10% share in Austria, Germany or the Netherlands, for example. Biotech alone reached 15.7% in 2014 in Austria.
- In the fruit and vegetable market, 20% of the products in many countries are organic products. Italy, Ireland, France, Germany and Sweden, for example (Meredith, Willer (eds.) 2016).

It can be said that the potential of organic products has not yet been dumped. Research has shown that women, young people and foodies are most interested in organic products. Although nearly every consumer is aware of organic production, communication can still be improved. About half of consumers are aware of the difference between organic and non-organic production and the exact terms of certification. In the United States, 92% of consumers say organic-products have the same good taste as traditional ones, and waiting for a better taste in Western Europe is one of the main reasons for the consumption of organic products. Professional cooks also agree with this.

If we want to combine the size of organic areas with the size of the market, we can state the following. Organic cultivation accounts for 5.7% of the EU's total cultivated land. So the size of the cultivated land is higher than the turnover. Average area growth has fallen to 1.1% in 2014. The number of producers increased by 0.2% over the same period. In many countries we find stagnation in the number of producers, especially in pioneering countries such as Denmark, Austria, or Germany, the United Kingdom (Meredith, Willer (eds.) 2016).

Table 1. Organic production and market according to country groups

Country group	Retail turnover (billion euro)	consumption per person (euro)	The number of producers	Area (million ha)	% of whole area
EU-28	24,000	47,4	257 525	10,3	5,70%
Europe	26,200	35,5	339 824	11,6	2,40%
World	62,600	8,3	2 260 361	43,7	1,00%
EU-15	23,500	58,0	194 979	7,8	6,10%
EU-13	0,500	4,0	62 546	2,4	4,70%
CPC	0,005	0,1	73 375	0,5	1,50%
EFTA	2,100	154,0	8 500	0,2	4,40%
Other european countries	0,100	1,0	424	0,7	0,20%

Source: (Meredith, Willer (eds.) 2016)

This is also confirmed by Luczka, which is behind the spatial growth of traffic growth. Many organic farmers in Poland are forced to sell their product as a conventional one because they do not meet demand for supply. In Central and Eastern Europe, the main reason for this is the average price of high ecological products (Luczka 2016).

Subsidies

Support for organic production can be found in the new Rural Development Program. This rate varies from one country to another. We can observe a big scattering. 0.2% in Malta and 13.2% in Denmark, for the total Rural Development Program for organic agriculture. The purpose of the support is to encourage the conversion of conventional areas into organic areas and, secondly, to preserve it in areas already organically cultivated. The purpose of the support is twofold. On the one hand, the protection of the environment is a guarantee of beneficial effects, for example preserving biodiversity, protecting the soil from lower environmental loads, protecting the water bases and promoting higher nutritious foods. Until 2020, Hungary intends to allocate a total euro 207 589 705 in the amount of HUF 64.4 billion. 80% of this can be used for ÖKO support. The supporting intensity is 100%, no degression is applied. Support is a field-based, non-refundable subsidy. The purpose of the aid is to compensate for over-costs and to compensate for lost profits and revenues (NAK 2016).

Issues of the efficiency of ecological supply chains

(This chapter is based on (Meredith, Willer (eds.) 2016). If a part has different source I mark it separately).

Supply chains suffer from shortcomings in supply and demand, logistical problems that do not allow supply and demand to be coordinated. Studies on organic supply chains address a number of issues that include:

- characterized by high operating costs,
- the lack of consistency between supply and demand, not meeting the two,
- poor reliability of supply,
- lack of cooperation between the members of the chain,
- different values and motivations between different actors in the chain,
- lack of information flow.

We do not have the right information on this issue. For the end users and the supply chain members, the entire system is not transparent and thus the operator who is transparent to the system is very rare. The system of organic products satisfies ever-changing consumer demands, but will need to adapt to rapidly changing demographic and consumer preferences as well as to a more complex and more global business environment. To do this, it is necessary to improve traceability and to develop the insurance system. As the long distribution chain is difficult to track and cost, the distribution chains need to be shortened, and it is also necessary to improve fairness, reliability and accuracy in order to increase consumer confidence again (Szymczyk 2015). Which is, moreover, a fundamental issue in the production and marketing of organic products.

Organic farming developed primarily at the level of primary production, since at the beginning of the 20th century it started to use cereals, vegetables, fruit and vegetable raw foods, and the regulation was associated with it. Initially, there was no need to regulate processing modes, but the food industry's development has become increasingly needed. This primary level regulation is reflected in ecological research, innovation and sectoral regulation. At the same time, it can be said today that due to the high spread of processed foods, consumer expectations are often perceived at the end product level and appear there. However, processing is less regulated than the primary production level. Therefore, it would be of paramount importance to regulate this and to ensure better processing technology, sustainable and reusable packaging, and quality and safety issues in the ecological supply chains. Reducing the size of the ecological footprint and minimizing the effects of climate change are also challenges for the ecological supply chains and draw attention to the simplification and shortening of logistics in organic production networks. Realizing this would also help to Transparency in the market is weak and does not provide sufficient information on future investments. The development of the organic sector requires not only reliable political support for farmers and food businesses, but also a reliable information system. Despite the efforts made by the private sector sectoral ecosystems, and despite the fact that EU eco-legislation requires the collection of relevant statistical information, organic market data is not nearly as detailed and reliable as general agricultural and food

statistics. This is the case even in countries with relatively developed ecological markets. It is as if this sector is out of sight, avoiding any attacks or transparency. Since control fees in this sector are a compensation for rating, producers and traders would be more vulnerable as a result of detailed disclosure. However, retail chains with existing detailed data will treat this information as business secrets, and will not voluntarily outsource it. restore confidence while reducing costs. Indeed, in most countries very simple basic data is available and most EU countries do not have data on domestic markets, international trade, consumer prices or production volumes. The incomplete resolution of the crop or product is less useful for businesses. What makes matters even worse is that there is no uniform, harmonized distribution system that can aggregate and compare data. There is no information on the economic performance of organic economies in the EU either. For example, Bulgaria, Malta and Romania do not publish any organic farms in the EU Farm Accountancy Data Network (FADN). At the half of Member States organic farms in FADN are incomplete and the small sample size does not allow for conclusions on the competitiveness of organic farms. Consequently, there is no transparency in the organic market, which means that it does not attract investors.

What is necessary to make better use of the growth dynamics of the ecological agriculture sector? First of all, the obstacles that have emerged should be overcome. In particular, transparency should be ensured and attracting the sector to investors. To do this, it is necessary for the decisive players of both politics and the economy to make openness and change.

Member States should be clearly obliged to follow the organic sector and follow the strategy. The production of organic food and agricultural subsidies should be designed to address the most important bottlenecks for further development. With each country, region and producer customized solutions, they can contribute to exploiting sector potential.

- Support for shorter ecological supply chains, enabling environmental and social benefits. As a result, national and regional rural development projects should place greater emphasis on local food markets (producer markets) and supply chain management (supply chain for special projects). This promotes greater balance between local, regional and international organic products.
- Improved statistical processes are needed to increase the accuracy of ecological market data collection. In order to avoid stopping dynamic ecological market growth, reliable market and economic data are needed, especially from the internal information system of farms. To this end, authorities and decision-makers must take action and the EU must strengthen the institutional framework for the collection, analysis and dissemination of organic market data. It is essential to have reliable information on the competitiveness and economic performance of organic farms in the EU. Therefore, the EU FADN should also have the economic data of each Member State for sample size organic farms that allow for proper analysis and sound decision making.

For further development, the following principles must be implemented.

- Emphasize the transformative nature of organic production.
- Ensuring that there is always a fairness in the value chain that is based on organized cooperation between farmers, workers and processors, distributors, traders and consumers.
- Implementation of paradigm shift in education to enhance the sharing of expertise and know-how already created by the organic community in recent decades.
- To recognize the need to address the most pressing challenges facing the ecological sector.

Further development of the agri-food systems and the development of knowledge transfer require additional private and public investment in the field of agri-ecological research and innovation. Systems that follow the deepened practice of organic farming can achieve 20% higher profits, so innovation returns in the results (Dinis et al. 2015).

A supportive policy environment and private sector investment based on ecological principles can jointly assist the future development of the organic food and agriculture sector (Meredith, Willer (eds.) 2016).

Sales and marketing channels

Channels in different countries differ from country to country. France, Italy and Germany have achieved strong market growth in recent years. Typically, specialized retailers perform a larger sales slice. Expertise and the size of sales space play an important role in sales. Nevertheless, we can see that the supermarket countries have been able to continually increase the sales of organic foodstuffs (eg Austria, Denmark, Sweden, Switzerland and the United Kingdom). At the same time, in countries such as Germany, specialist marketing channels (organic shops) have grown significantly, while the sale of supermarkets has stagnated before 2014.

Almost half of retailers engaged in the trade in mass products increased the turnover and supply of natural products. The most successful merchants have developed their own labeling product line to designate and differentiate their natural products (Richmann 1999).

There are many products that have a significant share of the entire sales market:

- In many countries, organic eggs are one of the success stories of the entire retail market. For example, Switzerland and France have a market share of more than 20%. In most other countries where data is available.
- Organic fruits and vegetables continue to be very popular with European organic-consumers. After the egg, organic vegetables have the highest market share, which is 9 to 15% of the sales volume of all vegetables sold in

Switzerland, Austria and Germany. For example, fresh carrots have only 30% market share in Germany.

- In some countries, organic dairy products account for about 5% of all milk production. In Switzerland, they still reach 10%.
- Individual products can achieve a much larger market share. In Germany, organic baby food and meat supplements, representing more than 40% and 60%, are good examples.
- On the other hand, products such as organic beverages (except wine) and meat (especially poultry) generally have a low market share. Often, these products are highly processed and / or very cheap in the traditional market. Growth trends in European organic food and farming.

Some organic products within the European organic markets are more typical.

A survey conducted as part of the OrganicDataNetwork project shows that:

- Fruits and vegetables are pioneer organic products in Europe. Currently, about one fifth of the national organic markets are represented. In Europe, the organic market is dominated by perishable fresh produce on traditional markets. Fresh products are particularly characteristic in Italy, Ireland, Norway, Sweden and Germany.
- In many countries and in particular in northern Europe, animal products, in particular milk and dairy products, account for a large proportion of all organic products sold (up to 20%). Organic meat and meat products are very successful and account for about 10% of the organic market in Belgium, the Netherlands, Finland and France.
- Drinks, especially wines, are an important part of the organic market - they have more than 10% share in France and Croatia.
- Hot drinks (coffee, tea, cocoa) account for 3-5% of the organic market in many countries.
- Grain products easily sold and stored in supermarkets have a high market share in the Czech Republic, Finland and Norway.
- Bread and pastry are very important in the organic range, with 10% market share in Switzerland, the Netherlands, France, Sweden, Finland and Germany (Meredith, Willer (eds.) 2016).

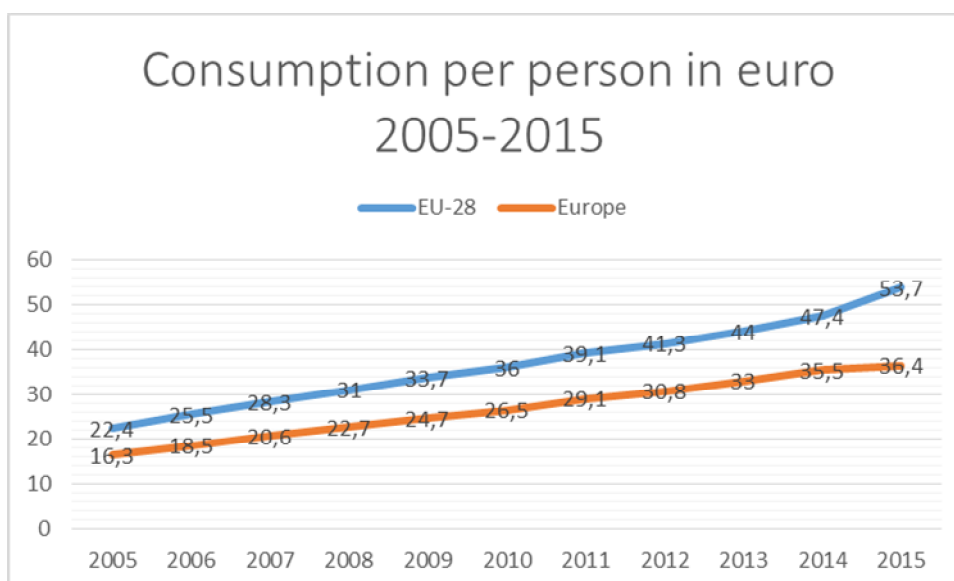


Figure 1. Consumption per person in Europe

Source: (Meredith, Willer (eds.) 2016; Willer, Lernoud (eds.) 2017)

By repeating a 2006 research, I compared what happened and what has happened in the past 11 years. In addition to the demographic data, the questionnaires examined household income and the typical consumer and consumption habits. The questionnaire asked about the qualification of organic products, such as their beneficial and disadvantageous properties. She has been researching what kind of foods typically are placed in the basket of consumers and what are the main purchasing locations. He also looked at the motivations of consumption, and sought out the possible even more acceptable surcharges.

According to Hofer, the consumption of organic products also plays an important role in the health and environmental aspects of economic competitiveness. However, he adds that the cause of health is due to the consumption of organic products, while the other two aspects are the consequence. Because of the health reason, consumption can be increased, with the consequence of increasing production, which calls for the product structure to improve, with which competitiveness also increases. This also implies a more environmentally friendly technological presence, which will improve the environmental performance of production (Hofer 2009).

The survey consisted of a questionnaire of 20 questions, both on the one hand and on the other by selected consumers. The survey is still ongoing, so at the time of writing this article only the processing of less than 100 questionnaires was possible. Over time, this number will increase and reach the hundreds of magnitude. The survey is true that it can not be considered representative at this time, but its results are similar to those of Hofer's research conducted 11 years ago.

The main problem of organic products was the higher consumer price of the respondents. He followed the question of reliability and non-domestic affiliation. Among its benefits, it is clear that its chemical non-chemical properties and its environmental impact are considered. So the positive effect on health has come out in this case. Reliability and quality are also important for consumers. So, an important aspect of the consumption of organic products is how far the producer and the goods are trusted. So there is not enough certification here, credibility and confidence in the qualification process and in the qualifiers are important for the consumer.

The location of the place of purchase for the interviewees was of the utmost importance and, accordingly, many people buy hyper- or supermarket products if they are consumed at all. Typically, they only consume organic products on a monthly basis and the amounts to be paid for them did not reach 10,000 HUF (35 euros) per month. The role of specialty shops in Germany seems to be negligible. Typical purchase of organic products is that when shopping in the shopping cart is sold in the basket.

Consumption motivations include better quality, healthier status and environmental aspects as they generally link these properties to organic products. Just as the consumption of self-made product and the health aspects are of paramount importance. Just as the use of advertising opportunities did not play a role in motivating factors.

Consumption also has attractive packaging and availability, so the right distribution channels are required to have a higher consumption of this product range.

According to consumer impressions, the price of organic products is roughly twice that of traditional products. What they would tolerate for consumers is very similar to the 20-30% premium known in the literature. So the interviewees are very price-sensitive about this product range. In order to spread the product range to lower prices, confidence-building and a good example of friends and acquaintances are needed to make these products more appropriate.

Indeed, it is also apparent from consumers' inquiries that, in order to promote better distribution, it is essential to broaden and deepen awareness, to strengthen and apply advertising campaigns. In addition, with the help of unique marketing tools, the consumer can be increased by using more modern, digital means of marketing (Cairns 2013).

Summary and Conclusion

The health factor of domestic organic-products is the great importance, but the consumer price of the product range is one of the biggest obstacles to widespread use of these products. The role of mistrust is significant. The surveyed consumers are skeptical as to whether the product is truly organic or not reliable. This fits in with the fact that consumers do not have reliable and thorough knowledge of organic production, its rules and procedures. Developing awareness should definitely be given more emphasis if we want to exploit the market potential of this

segment in our country. Indeed, over the past decade, consumption of organic food has not increased in terms of quantity and turnover in HUF, in proportion to domestic food consumption. This was also confirmed by the questionnaire results. One of the main reasons for the downturn in particular a decline in food expenditure of households on organic products. This is partly true, as the respondents were not justified by the income situation as reducing their spending, but with the scarcity of sales channels, excessive consumer prices and the scarcity of knowledge on organic products was still the cause of the decline. Another major obstacle to the procurement of domestic organic-products is the scarcity, time and distance of purchasing opportunities, especially in rural areas. This is true in the region, the capital is becoming less and less. Hyper and Supermarkets are becoming increasingly popular in these products.

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GOSPODARKA ROLNA I PRODUKCJA NA ŚWIECIE I NA WĘGRZECH

Streszczenie: Rolnictwo ekologiczne jest ważną formą zrównoważonego rolnictwa, które w przeciwieństwie do produkcji zintegrowanej nie wykorzystuje chemikaliów i sztucznych nawozów podczas produkcji na rynkach krajów rozwiniętych, gdzie środowisko i dom pozostają ważne dla konsumentów. Artykuł porusza kwestie dotyczące wiedzy konsumentów odnośnie korzyści płynących z produktów ekologicznych i ich wpływu na środowisko, aby nie traktowali ich tylko jako wyroby luksusowe. Kolejną ważną kwestią jest cena, jaką konsumenci mogą płacić za tego typu produkty na rynku, a także istniejący problem nieufności klientów względem producentów i samych produktów. W artykule uwzględniono omówienie wyników badań dotyczących powyższej kwestii, które wskazują, iż jest to bardzo ważny problem, dotyczący rynku węgierskiego, ale także i czynnik mający wpływ na rynki międzynarodowe.

Słowa kluczowe: produkty organiczne, ekologiczne gospodarstwo, rolnictwo, uprawa i produkcja żywności ekologicznej



ECO-INNOVATION OF PRODUCTS AND SERVICES

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Abstract: The paper deals with the issues of eco-innovation, which are related to the way in which natural resources are used and the way in which we consume and manufacture. Thanks to eco-innovation, enterprises can gain a competitive advantage in the market. Eco-innovations are closely related to the manner in which natural resources are used and the way we manufacture and consume. We can find many definitions of eco-innovation. Although nowadays tremendous importance is attached to eco-innovations, they require a system-based approach to reduce consumption of natural resources, emission of pollutants and the amount of waste generated. Special attention is given in the paper to activities supporting the development of this particular form of innovation.

Keywords: eco-innovative products and services, production cycle, environmental protection, innovation index, pro-ecological policy, ecology, European Union

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Introduction

Environmental protection, in addition to its functions of protection and recreation of ecosystems, that have been in place until now, has become a significant component of the global economic policy. It is probably safe to say that in recent years environmental protection has become the second, beside innovation, area of the development policy, particularly emphasized by the European Union. In the opinion of the European Commission, eco-innovations are not only the best way to solve the problem of environmental pollution, but they can also make the whole economies and individual enterprises more competitive.

Environmental protection holds an important place in the policy of the European Union. Its significance was already noted in the Treaty on European Communities, which in Art. 130r enumerates actions of the Community relating to the environment, which have the following objectives:

- to preserve, protect and improve the quality of the environment,
- to contribute towards protecting human health,
- to ensure a prudent and rational utilization of natural resources.

The European Community environmental policy is based on the principles of:

- 1) foresight,
- 2) taking preventive actions,
- 3) rectifying environmental damage at source,

4) the polluter paying the costs of the damage.

The importance of the pro-ecological policy was also confirmed in the Single European Act, setting forth the fundamental priorities of this policy (Kowalik 2015, p. 24). Pro-environmental activity has to be primarily of preventive nature. The principle of eco-development is understood as the development compatible with natural conditions. It involves optimal use of resources, without significant and irreparable depletion. Currently the EU environmental legislation comprises ca. 200 legal acts concerning inter alia water and air pollution, waste and chemical substances management, biotechnics, environmental protection (Piasecki et al. 2001, p. 166).

Principles of environmental protection being in force in the European Union belong to the highest in the world. They are the result of many years of work and embrace numerous issues, including but not limited to fight against the climate changes, protection of rare plant and animal species, elimination of health problems caused by environmental pollution and more rational use of natural resources.

As such great importance is attached to eco-innovation, it is reasonable to ask what exactly is meant by eco-innovation. Many definitions of this term can be found in the literature. According to the generally accepted definition, eco-innovations are new products, management methods, manufacturing methods, ways of service provision and processes of resource exploitation which ensure lower risk of environmental pollution, use fewer raw materials and release fewer pollutants than alternative solutions (Kemp, Pearson 2007, p. 5). Another author defines eco-innovations as “intentional conduct characterized by initiative, comprising the stage of product design and integrated management during its life cycle, which subsequently contributes to pro-ecological modernization of the industrial era’s societies, by accounting for environmental issues in the development of products and related processes (Carley, Spapens 2000, p. 157). The above definitions show that eco-innovations are all innovations that attempt to reduce negative impact on the natural environment (Stala 2015, p. 43). The aim of eco-innovations is to improve the condition of the natural environment by reduction of the negative impact of manufacturing activity on the environment and by more rational use of natural resources. Application of eco-innovative solutions undoubtedly fosters development of new technologies and services and thus enterprises become more environment friendly (Knop, Brzóška 2017, p. 89). Apart from the above benefits, somewhat different positive effects of eco-innovations should be also remembered, such as: reduction of business costs or upgrading of the company image. Eco-innovations are closely related to the manner in which natural resources are used and the way we manufacture and consume (Skowron-Grabowska et al. 2017, p. 102). Using eco-innovations which foster development of new processes, technologies and services, owing to which enterprises become more environment friendly, enables optimization of the economic growth potential and also makes it possible to face such challenges as shortage of natural resources, climate changes or disappearing biodiversity.

Eco-innovative products and services

In order to define an eco-innovative product, its innovation should be determined in direct and indirect influence on the environment. It seems that a product is eco-innovative when its innovation or innovation of its production technology exerts lesser pressure on the environment (Flis 2010, p. 101). In other words, eco-innovative products are the goods manufactured with minimal overall impact on the environment. With regard to the place where eco-innovation is to be found in the production cycle, three basic groups can be distinguished:

- a) the first group consists of innovations leading to creation of products with entirely new ecological parameters, exerting much lesser pressure on the environment. An example of such eco-innovation is disposable biodegradable tableware or various energy-efficient household appliances, or fuel-efficient cars,
- b) the second group comprises innovations leading to generation of products with the same ecological parameters as other products available on the market, but using less energy and raw materials owing to the use of new technologies in the production process,
- c) the third group combines the features of the first two groups, which means that both the product and the technology of its production are eco-innovative.

Services, in turn, are eco-innovative when eco-innovative products are used in the process of service provision or the service provider uses eco-innovative organizational or process solutions. Social services are particularly important because they can have greater implications for the environment than tangible products. Eco-innovative services include inter alia ecological financial products (e.g. investments taking into account ecological criteria), environmental services (e.g. waste management) and services reducing the demand for tangible goods (e.g. car-sharing). Both process innovations and organizational innovations have as their aim inter alia cost reduction by the application of new and more efficient concepts of production, delivery and internal organization. The starting point for the distinction between process innovations and organizational innovations is the type of activity. Namely, process innovations involve mainly implementation of new equipment, software, definite techniques or procedures, whereas organizational innovations apply mainly to people and organization of work in an enterprise. With regard to the manner of use of eco-innovations in the enterprise organization, we distinguish between eco-innovation of services and eco-innovative services. A service provider may perform non-eco-innovative services, but it can be eco-innovative in the manner of its management and organization. Thanks to its internal modernizations the service provider can be environment-friendly or can provide eco-innovative services such as construction of a waste treatment plant. There are many ways in which a business organization can have an impact on environmental protection, although all these ways boil down to as efficient use of energy and raw materials as possible. It is worth noting here that the simplest example of eco-innovation in a business organization is saving office supplies, advocated among staff members. Organizing educational campaigns in companies

improves the employees' knowledge of environmental protection and develops their positive attitude towards that issue.

There is no doubt that development of eco-innovation is determined to the most part by the level of people's awareness, which is reflected by the level of organizational culture. As L. Woźniak points out "it is commonly believed that any manifestations of innovation are connected with tremendous financial expenditures, those innovations, however, constitute a process of creative future-minded thinking, as a result of which almost maximal use of all dormant reserves of the particular environment is achieved, without the necessity of considerable financial outlays. The greatest barrier to social progress is the barrier of people's mentality, hindering any innovative projects which go beyond the traditional model established in the particular society" (Woźniak, Dziedzic, Kud 2005, p. 237).

Determinants of eco-innovation

Environmental protection is now an inseparable component of business operations. Currently businesses are facing numerous challenges connected with the constantly deteriorating condition of the natural environment, climate changes, rising prices of raw materials and legal restrictions. More and more rigorous requirements concerning the manner of conducting business operations are due to the fact that business activities carry serious implications for the quality of the environment. Business operations have unquestionably a significant impact on the condition of the natural environment. Eco-innovation leads to the creation of a product that, with its parameters and purpose, corresponds to similar products offered on the market, however, its production consumed less amount of natural resources and energy.

There are many reasons for introduction of ecological innovations in an enterprise. Those reasons can be divided into two basic groups: internal and external. Internal factors are those related to the specific character of an enterprise: - its size (small enterprises have smaller innovation potential because of their limited financial and organizational capacities), - industry (eco-innovations tend to be implemented in paper, printing and chemical industries, but seem to be rare in such sectors as metal products, food products, machinery production); - company culture (in many companies environmental protection is regarded as an element of their culture because environment-friendly processes and products can improve the market position and general image of the organization) (Urbaniec 2009, p. 57).

Internal factors, therefore, include those features which emerge from inside the enterprise. Those factors include for instance: raising ecological awareness of the entrepreneurs themselves, voluntary commitments, managers' aspirations, environmental policy of the enterprise (Zawada et al. 2015, p. 8).

External factors, in turn, include first of all the government ecological policy, constantly rising raw material and energy prices (Stępień, Łęgowik-Świącik, Kuraś 2017). Growth of social awareness can be also regarded as an external factor. Due to various information campaigns social awareness is significantly rising year by

year. Hence, enterprises should introduce innovations and create new ecological trends to mark their position on the market.

Introduction of innovations depends also on such external factors as institutional support, social expectations and relations with suppliers and customers.

Conclusions

Despite great emphasis on eco-innovative activity in recent years, research shows that more actions of this type are still necessary, both in the European Union and in Poland. Annual data published by the European Commission show that in the field of innovation the European Union states still cannot catch up with other highly developed countries, for instance: the United States, South Korea or Japan. Another alarming phenomenon are growing differences in innovation and research within the European Union itself. It appears that in spite the annual global improvement of innovation indexes, some countries with the already high innovation level, show progress in this field, while no progress is noted in other countries. Based on research taking into account 24 indicators (including but not limited to investments in innovations, investments in “green technologies”, level of expenditures on research and development), the EU states have been divided into 4 groups (*Table 1*).

Table 1. Innovation ranking

Group	Criterion of performance assessment	EU Member States
INNOVATION LEADERS	much above the EU average	Germany, Sweden, Denmark, Finland
STRONG INNOVATORS	above the EU average	Netherlands, France, Belgium, Luxembourg, United Kingdom, Austria
MODERATE INNOVATORS	below the EU average	Italy, Spain, Portugal, Czech Republic, Hungary, Lithuania
MODEST INNOVATORS	much below the EU average	Poland, Latvia, Romania, Bulgaria, Cyprus, Malta

Source: (<https://ec.europa.eu/>)

As can be seen, our country belongs to the last group and cannot boast of too high a score in the Summary Innovation Index. Poland is one of the most poorly utilizing natural resources and least energy-efficient economies of the European Union (*Innowacyjność polskiej gospodarki*, p. 45). The reasons for this situation can be inter alia the overall economic downturn in consequence of the financial crisis which began in 2008, insufficient cooperation between the research sector and the industry as well as numerous administrative hurdles to innovations. Obstacles to innovations in Poland are mainly of economic nature and, as mentioned before, they boil down to: poor system of economic and tax incentives, access to capital, uncertain return on investment or lack of sufficient knowledge of potential economic benefits from implementation of innovations.

It is comforting, however, that in April 2014 Poland adopted the Smart Growth Operational Programme 2014-2020, which was approved by the European Commission, where such fields as reduction of waste, recycling, energy-efficient technologies and sustainable transport were treated as matters of priority. According to the authors' intentions, the Programme supports scientific research, development of new innovative technologies and actions to make small and medium enterprises more competitive. Its basic task is to stimulate the innovation of the Polish economy by increasing private expenditures on research and development and creation of businesses' demand for innovations and research and development works. The Polish government is taking constant actions to reduce burdens imposed on citizens and business entities. Special activity is geared to enterprises. Implemented measures aim to create favourable conditions for enterprise development by inter alia strengthening competitive edges and in effect to achieve stable economic growth in a long-term perspective. The objectives of those measures are first of all to improve the access of businesses to capital, to support entrepreneurial attitudes, to strengthen the business environment institutionally, organizationally and financially and to fill the information gap by providing access to analyses of competitiveness of industrial sectors (Skowron-Grabowska, Mesjasz-Lech 2016). Lastly, the EU funds cannot be overlooked with their positive impact on conduct of business activity in Poland (*Smart Growth ...*).

In the coming years the measures taken should bring about improvement in the field of eco-innovation in Poland. It will require, however, implementation of a coherent governmental policy, which on one hand will support the economic development of the country and on the other hand will ensure environmental protection. Environmental protection has become an inseparable element of the functioning of enterprises. Environmental protection is now an inseparable component of business operations. Thanks to eco-innovation, enterprises can gain a competitive advantage in the market. Eco-innovations are closely related to the manner in which natural resources are used and the way we manufacture and consume (Seroka-Stolka, Nowakowska-Grunt 2012, p. 366-371). There is no doubt that a company operating in a market economy that is not innovative may not survive. That is why more and more enterprises are constantly adapting to changes taking place in the environment and introducing new products and services.

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EKOINNOWACYJNOŚĆ PRODUKTÓW I USŁUG

Streszczenie: W artykule przedstawiono zagadnienie ekoinnowacji, które są powiązane ze sposobem, w jaki wykorzystuje się zasoby naturalne, oraz z tym, jak konsumujemy i produkujemy. Mimo iż ekoinnowacjom przypisuje się już dzisiaj ogromne znaczenie, wymagają one systemowego podejścia na rzecz zmniejszenia zużycia surowców naturalnych, emisji zanieczyszczeń oraz ilości wytwarzanych odpadów. W artykule zwrócono uwagę na działania wspierające rozwój tej szczególnej formy innowacji.

Słowa kluczowe: produkty i usługi ekoinnowacyjne, cykl produkcyjny, ochrona środowiska, wskaźnik innowacyjności, ekologia, Unia Europejska



BALANCED SCORECARD METHOD IN THE OUTSOURCING DECISION

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Abstract: A long-term business relationship of B2B type is one of the most desirable forms of cooperation aimed at the common and integrated pursuit of an increase in competitiveness and market value. Its advantage is primarily the mutual exchange of experiences and competencies on the basis of which innovative business solutions come into being. Among long-term forms of cooperation there is outsourcing, which consists in maintaining interdependent relationships conditioned by mutual trust and sharing responsibility. However, the standard conceptual model differs from the business reality. Many outsourcing contacts end in failure, the source of which is mainly the vaguely specified needs and expectations of the client. The analysis of the reasons for breaking contracts indicates the need for greater concentration at the stage of initiating and implementing the project. The aim of the paper has been to present the ways to use Balanced Scoreboard in order to establish the principle of successive and long-term cooperation. The objective has been accomplished on the basis of the empirical research conducted so far, which has been the basis for the identification of the key factors of the outsourcing relationship necessary to be taken into account in BSC.

Keywords: Balanced Scoreboard, business decisions, outsourcing, supplier assessment

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The significance of outsourcing in the modern economy

Enterprises operating in the global market are constantly searching for new solutions allowing them to gain and maintain competitive advantage. One of the key solutions in the strategic dimension of business management (Stasiak-Betlejewska et al. 2016, p. 145). is outsourcing, which allows for maintaining a long-term business relationship (Budzyńska 2014, p. 31).

It is a form of an operational strategy of the enterprise which enables focusing on strengths, reducing the cost of capital and simultaneously responding efficiently to market needs (Gunasekaran et al. 2015, p. 154). In the activity of different enterprises, outsourcing is treated as a type of a long-term strategy which brings benefits to both sides (Schwarz 2014, p. 155; Strzelczyk 2011, p. 36-37; Sitar 2012, p. 223):

- the ability of the company to use outsourcing in order to achieve its business goals and/or develop its strategies;
- the ability of the company to focus on its basic activity;

- the ability of the organization to constantly use and manage (internal and external) resources in order to strengthen the competitive position;
- reduction in corporate risk in relation to incurring larger investments for the benefit of main activities and transferring non-core functions and ancillary activities to the seller;
- responding to business needs;
- the ability of the company to use knowledge and economies of scale in terms of human and technological resources;
- the efficiency of outsourcing contracts allows the company to avoid large investments;
- the ability of the organization to increase its value through increased profits, reduced costs and/or accelerated movement of capital;
- the achievement of expected savings;
- the nature of business practice, which stimulates the creativity of the company and refers to the ability to offer new services as well as the improvement and development of new internal procedures.

Weaknesses of the use of outsourcing

Although there has been observed a dynamic growth in outsourcing contracts in the world (*Annual Report 2015*), many of them end in failure. The most important problems are primarily associated with inadequate preparation and implementation of the venture, particularly in terms of defining the objectives and principles of cooperation (Nowakowska-Grunt, Sałek, Strzelczyk 2017, p. 25; Brzozowska, Starostka-Patyk 2010, p. 4-5). The drawbacks of using the services of an external company, which mostly bring about breaking an outsourcing contract, are presented in *Figure 1*.

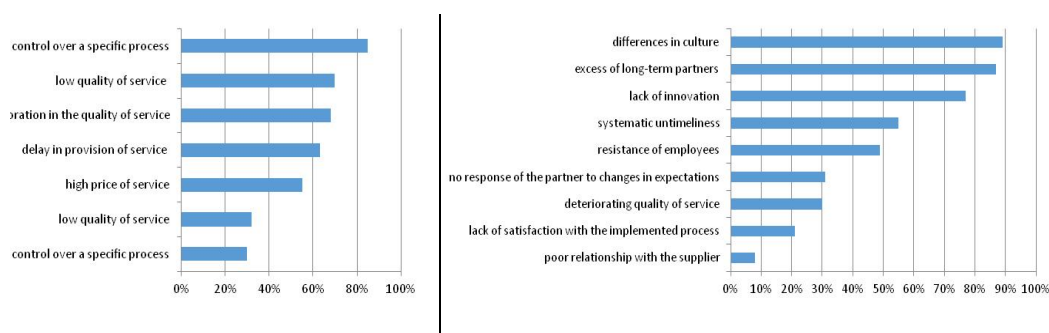


Figure 1. The disadvantages of the use of outsourcing and the final reasons for breaking a long-term contract

Source: Own study based on (Kocot 2013, p. 72-73)

Among the most serious problems of the use of outsourcing there is the fear of losing total control over the process and the low quality of the service provided in relation to the suggested price. At the same time, dissatisfaction with the way of providing service and bad relationship with the supplier are the main reasons for breaking contracts (Korombel 2013, p. 28).

According to D. Ciesielska and M.J. Radło, premature termination of the contract is also on the side of the entity implementing outsourcing and refers to (Ciesielska, Radło (red.) 2014, p. 28):

- the wrong choice of the outsourced area,
- limited knowledge in the field of the implementation of the outsourcing project,
- management of a few outsourcing projects at the same time,
- lack of support and involvement of managers of the company,
- rush.

K. Vitasek, M. Ledyard and K. Manrodt, as two main reasons for failure, indicate “vaguely determined expectations and inconsistent interests of the parties during the execution of the contract” (Vitasek, Ledyard, Manrodt 2011, p. 42-42). An important issue is also different priorities of the client and their partner, which affects the perception of mutual goals and expectations (Barrett, Misiaszek 2007).

Scorecard in outsourcing

In outsourcing contracts there is no link between the goals in the outsourcing contract and the strategy of the client. Most of the measurements in the document describe the operational control and are not connected with corporate objectives. In order to define the common outsourcing strategy of business partners one may use the instrument of strategic management, i.e. Balanced Scorecard (BSC). In this context, outsourcing can be generally defined with the following four perspectives (Felice, Petrillo, Autorino 2015, p. 8403):

1. From the financial point of view, outsourcing means generating profits for both parties on the basis of the synergy effect i.e. commonly generated greater profit than in the case of the individually conducted activity.
2. From the point of view of the customer, outsourcing means three possible levels of customer service – the first one refers to the service provided to the entity by the 3PL supplier, the second one refers to the service provided to the final customer by the 3PL recipient, the third one – the service provided to the final customer by the 3PL supplier.
3. From the point of view of processes, outsourcing means management of logistic processes in the most efficient manner.
4. From the point of view of innovation and development, strengthening mutual ties through the implementation of new resources and solutions increasing the efficiency of cooperation.

Figure 2 presents the graphical form of BSC for the client of outsourcing services taking into account performance measurement indicators.

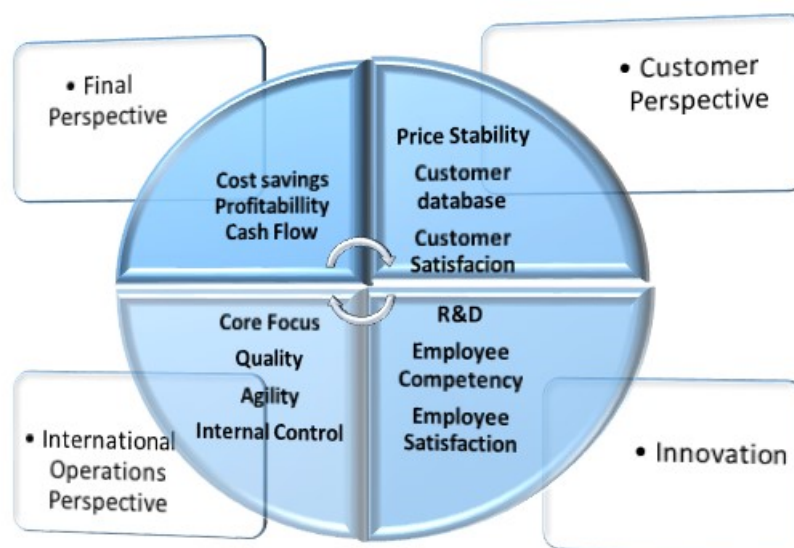


Figure 2. The structure of Balanced Scorecard

Source: Own study based on (Tiader et al. 2014, p. 618)

(1) The financial perspective indicates whether the cooperation undertaken contributes to improving the results prior to the implementation of outsourcing. The valuation criteria are the costs of outsourcing i.e. fixed costs concerning the access to fixed resources, the level of generated savings, level of expenditure, cash flow, project profitability.

(2) The partner perspective enables the identification of the needs and expectations of both parties to the relationship, measured with measurable objectives, refers to mutual communication, exchange of information and control.

(3) The internal business perspective is aimed at increasing the efficiency of business processes implemented due to the relationship, e.g. the level of sales, market size, market share etc.

(4) The innovation perspective determines the resources necessary for further functioning of the relationship, e.g. training, exchange of knowledge, proposing new solutions etc.

The application of Balanced Scorecard

In order to develop the common strategy for outsourcing management there should be created the overall BSC for both partners simultaneously, the dimensions and measures of which will be determined by both the problems and factors of effective cooperation. To identify some important factors of the implementation of outsourcing there have been used the studies of other authors conducted in this area so far. The listing of the selected Polish and foreign studies ordered by the selected areas of outsourcing management and the period of their conduct is presented below.

Table 1. The listing of the scientific research in the field of the use of outsourcing

Scope	Reference	Year of study
Area 1. The scope of the use of outsourcing	The Conference Board “Outsourcing w Polsce w 2006 r.”, [in:] M. Jaślan (2007), <i>Outsourcing IT w sektorze przemysłowym</i> , Portal Rozwiązań w IT Biznesie, https://www.erp-view.pl/it_solutions/outsourcing_it_w_sektorze_przemyslowym.html .	2006
	CWS-boco Polska i “Outsourcing Magazine”: Dojrzałość outsourcingowa polskich przedsiębiorstw, [in:] A. Pasek (2011), <i>Czy outsourcing może więcej?</i> , Network Magazyn, http://www.networkmagazyn.pl/czy-outsourcing-moze-wiecej .	2010
	<i>Trendy HR w sektorze Transport Spedycja Logistyka</i> , (2016), raport ManpowerGroup, http://www.manpowergroup.pl/wp-content/uploads/2016/09/2012_Trendy_HR_w_sektorze_TSL_raport_ManpowerGroup.pdf , p. 8.	2012
	Badanie rynku usług outsourcingowych w Polsce zrealizowanego przez IPSOS LOYALTY na zlecenie Grupy OEX, [in:] A. Zawadzka (2013), <i>Outsourcing coraz popularniejszy</i> , “Przegląd Outsourcingowy”, nr 4, p. 30-32.	2012
	<i>Deloitte’s 2016 Global Outsourcing Survey – May 2016</i> , Deloitte Development LLC, https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/operations/deloitte-nl-s&o-global-outsourcing-survey.pdf .	2016
Area 2. The factors determining the selection of the service provider	Ankieta miesięcznika Inżyniera i Utrzymanie Ruchu Zakładów Przemysłowych, [in:] D. Żabicki (2011), <i>Outsourcing utrzymania ruchu</i> , http://www.utzymanieruchu.pl/index.php?id=47&no_cache=1&tx_ttnews[tt_news]=5008&cHash=46a783c23d&type=98 .	2011
	S. Jarka (2011), <i>Stan i perspektywy rozwoju outsourcingu w Polsce</i> , “Zeszyty Naukowe SGGW w Warszawie. Ekonomika i Organizacja Gospodarki Żywnościowej”, nr 93, p. 154-156.	2011
	Raport Outsourcing procesów HR w Polsce, External Services, [in:] K. Żugar-Głapiak (2014), <i>Outsourcing jako kierunek zarządzania procesami funkcji personalnej w organizacji</i> , “Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, nr 355, p. 303.	2011
	HRL Polska, Outsourcing w zarządzaniu firmą w Polsce. Stan aktualny i perspektywy rozwoju, [in:] <i>Outsourcing usług w Polsce – raport z badania firm</i> , (2015), http://hrl.pl/outsourcing-uslug-w-polsce-raport-z-badania-firm/ .	2015
	PricewaterhouseCoopers, Outsourcing Comes of Age: The Rise of Collaborative Partnering, [in:] N. Bogdan, <i>Outsourcing usług HR. Part Cz. I</i> , http://www.hrnews.pl/WsparcieHR,112,.aspx .	2008

Area 3. Reasons/motivation for the use of outsourcing	S. Jarka (2011), <i>Stan i perspektywy rozwoju outsourcingu w Polsce</i> , "Zeszyty Naukowe SGGW w Warszawie. Ekonomika i Organizacja Gospodarki Żywnościowej", nr 93, p. 154-156.	2011
	Raport Outsourcing procesów HR w Polsce, External Services, [in:] K. Żugar-Głapiak (2014), <i>Outsourcing jako kierunek zarządzania procesami funkcji personalnej w organizacji</i> , "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", nr 355, p. 303.	2011
	HRL Polska, Outsourcing w zarządzaniu firmą w Polsce. Stan aktualny i perspektywy rozwoju, [in:] K. Żugar-Głapiak (2014), <i>Outsourcing jako kierunek zarządzania procesami funkcji personalnej w organizacji</i> , "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", nr 355.	2015
	<i>Deloitte's 2016 Global Outsourcing Survey – May 2016</i> , Deloitte Development LLC, https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/operations/deloitte-nl-s&o-global-outsourcing-survey.pdf .	2016
	The Conference Board "„Outsourcing w Polsce w 2006 r.”", [in:] M. Jaślan (2007), <i>Outsourcing IT w sektorze przemysłowym</i> , Portal Rozwiązań w IT Biznesie, https://www.erp-view.pl/it_solutions/outsourcing_it_w_sektorze_przemyslowym.html	2006
Area 4. The greatest benefits	Badania przeprowadzone przez IPSOS na zlecenie ArchiDoc, Korzyści z outsourcingu, [in:] Anam R. (oprac.) (2008), <i>Outsourcing usług: kto korzysta?</i> , http://www.egospodarka.pl/art/galeria/35732,Outsourcing-uslug-kto-korzysta,3,39,1.html .	2008
	Badanie rynku usług outsourcingowych w Polsce zrealizowanego przez IPSOS LOYALTY na zlecenie Grupy OEX, [in:] A. Zawadzka (2013), <i>Outsourcing coraz popularniejszy</i> , "Przegląd Outsourcingowy", nr 4	2012
	Quint and Whitelane Research, IT Outsourcing Study Netherlands, [in:] <i>Demand for outsourcing to grow in the Netherlands</i> , Consultancy.uk, https://www.consultancy.uk/news/2050/demand-for-outsourcing-to-grow-in-the-netherlands .	2015
	<i>2013 Third-Party Logistics Study, The State of Logistics Outsourcing Results and Findings of the 17th Annual Study</i> , file:///C:/Users/Kasia/Downloads/2013_3PL_Study.pdf, p. 16.	2013
Area 5. Innovation in outsourcing	A. Sadowski (2015), <i>Restrukturyzacja logistyki i zarządzania łańcuchami dostaw w obliczu wyzwań gospodarki cyrkulacyjnej</i> , "Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach", nr 249, p.186-188.	2015

Source: Own study

On the basis of the research conducted so far, indicated in *Table 1*, there have been isolated five key aspects of the use of outsourcing, which should be taken into account in the common strategy of relationship management. On the basis of the observations, there has been developed the ranking of essential factors of cooperation within the framework of individual areas. There have been taken into account only the components which, in the structure of the responses, amounted to more than 10% or, in the case of fragmentation, occupied the first seven positions. For each area, there have been isolated the repeated or similar factors, which have been ordered on the basis of the average rating. The results are presented in *Table 2*.

Table 2. The key areas and factors of the use of outsourcing

No.	Area 1	Area 2	Area 3	Area 4	Area 5
1	IT	Service quality	Focus on core business	Savings	Staff Skills
2	Sale and marketing	Price of services, cost advantages	Cost reduction	Focus on core business	Mutual trust
3	Logistics	Experience	Access to know-how	Organizational changes	Operational excellence
4	HR	Competence and knowledge	Improving competitiveness	Access to know-how	Know-how
5	Finance	Reputation of the company	Improved process quality	Increase safety	Organizational culture
6	B+R			Release of own resources	Cooperate work
7	Customer service			Improved process quality	Communication

Source: Own study

The presented rankings allow for the observation that, for many years, the most frequently isolated areas of the activity of the entity has been the area of IT, sales and marketing and logistics activity. The assessment of the potential supplier is usually determined by the quality and price of the service and their experience in the market. The main motivations of the use of outsourcing are originated in the concentration on the main activity of the entity and cost reduction. At the same time, this replicates the benefits of the use of outsourcing, among which additionally there can be distinguished organizational changes and access to new technologies and resources. Important problems requiring solutions are conflicts emerging in the relationship and dependence on suppliers, which are balanced by the implemented innovation concerning usually new skills of the staff and enhancing mutual trust.

In pursuit of effective cooperation, the key role is played by the area of motivation and expectations, desired benefits and the need for innovation, the combination of which is to reduce the level and scale of the existing problems and the reasons for giving up outsourcing. On the basis of the existing rankings of the factors of the key areas of the use of outsourcing, there has been prepared the BSC of the strategy of the efficient outsourcing cooperation, presented in *Figure 3*.

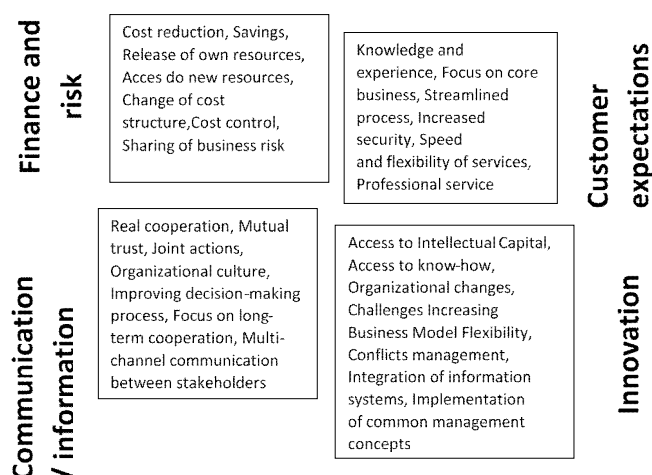


Figure 3. The structure of Balanced Scoreboard for the outsourcing relationship

Source: Own study based on (Tiader et al. 2014, p. 618)

The development of the common BSC takes into account the needs and expectations of the service provider the mismatch of which is the main reason for failure of cooperation. The isolated factors remain for discussion between the entities as well as the determination of the objectives desired and achievable by the provider, defined with the set of KPI indicators for individual dimensions of BSC. In the Table below, there is presented the exemplary structure of BSC with the list of areas and key performance indicators in terms of generating benefits for outsourcing (*Table 3*).

As it can be observed, the dimension of the customer and business processes, which is broken in the standard BSC, has been integrated purposely due to the nature of the activity. In the case of outsourcing, this dimension eventually refers to customer service through the implementation of the selected business processes. In turn, there has been additionally taken into account the aspect of effective communication between partners in BSC, which is essential from the point of view of building trust and mutual control

Table 3. The exemplary performance indicators in BSC of the outsourcing relationship

Perspective	Goals	KPI
Finance and risk	Reduction in contract costs Share of risk	Amount of goods/services invoiced by conventional rate or lower Level of fixed costs covered by the recipient (PLN) % level of costs covered due to transportation
Client and business processes	Increase in client's savings Compliance with the order An increase in the number of the realized urgent orders An increase in the level of services An increase in the number of solved problems	Unit price at the market level based on systematic industry benchmark (+/- 2%) X% of time required to adapt the services to the needs Number of received incomplete orders Number of supplies not compliant with the order Number of urgent orders handled in accordance with the customer expectations Number of complaints Number of orders received "on time" Number of problems unsolved during the implementation
Communication	An increase in the level of integration An improvement in documentation workflow An increase in the number of communication channels An increase in the cohesion of organizational culture Absorption of organizational concepts	Number of integrated modules of the IT system Number of listings and control reports Applied methods to improve documentation workflow Number of direct communication channels Number of organized regular business meetings Number of integration meetings Methods of conflict management Applied concepts of process and staff management
Innovation	Better adjustment of supply to business needs More effective risk management	Number of appropriate initiatives presented by the customer Number of appropriate initiatives presented by the supplier Presentation of the risk management plan Presentation of the risk reduction plan

Source: Own study on based (<http://www.procurement.vic.gov.au/>)

Conclusions

The observation of the main problems of the use of outsourcing and the reasons for breaking contracts indicates that entities, when taking the decision on the use of outsourcing, are often not aware of the multidimensionality and complexity of this type of project. The source of failure is not only in dissatisfaction with the provided services but most of all in a lack of true partnership based on trust and mutual respect for interests. A high quality of this type of relationship is therefore a great challenge and determines searching for new solutions.

In order to establish the coherent principles of cooperation and to determine the common strategy of partnership the tool of Balanced Scoreboard can be utilized. On the basis of the empirical research conducted so far, there have been identified the most important areas of the use of outsourcing and their factors which, in the opinion of the entities applying outsourcing, are an important aspect of business relationship management. Due to the performed observations, there have been isolated the key determinants of the efficient outsourcing, associated with the expectations, needs and goals of the establishment of long-term cooperation on the side of service recipients. The assignment of individual components, in accordance with the concept of BSC, allowed for the development of the tool supporting effective outsourcing cooperation, which, in further operations, may also serve as the assessment of the efficiency of the already existing relationships.

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ZRÓWNOWAŻONA KARTA WYNIKÓW W PROCESIE DECYZJI O OUTSOURCINGU

Streszczenie: Długoterminowa relacja biznesowa typu B2B stanowi jedną z bardziej pożądaných form współpracy, której celem jest wspólne i zintegrowane dążenie do wzrostu konkretności i wartości rynkowej. Jej zaletą jest przede wszystkim wzajemna wymiana doświadczeń i kompetencji, na bazie których powstają innowacyjne rozwiązania biznesowe. Wśród długoterminowych form współpracy znajduje się outsourcing, który polega na utrzymaniu zależnych relacji, warunkowanych wzajemnym zaufaniem i współdzieleniem odpowiedzialności. Wzorcowy model koncepcyjny odbiega jednak od biznesowej rzeczywistości. Wiele kontaktów outsourcingowych kończy się niepowodzeniem, którego źródło leży głównie w niejasno sprecyzowanych potrzebach i oczekiwaniach zleceniodawcy. Analiza przyczyn zrywania kontraktów wskazuje na potrzebę większej koncentracji na fazie inicjowania i wdrożenia projektu. Celem artykułu jest przedstawienie sposobów wykorzystania Zrównoważonej Karty Wyników (BSC) dla ustalenia zasad sukcesywnej i długoterminowej kooperacji. Cel zrealizowany został w oparciu o dotychczas przeprowadzone badania empiryczne, które stanowiły podstawę identyfikacji kluczowych czynników relacji outsourcingowej konieczne do uwzględnienia w Zrównoważonej Karcie Wyników.

Słowa kluczowe: decyzje biznesowe, ocena dostawcy, outsourcing, Zrównoważona Karta Wyników



CSR AND SHAPING OF VALUES FOR STAKEHOLDERS

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Abstract: The concept of an interest groups is strongly emphasized when defining the concept of corporate social responsibility (CSR). However, it is difficult to disagree with the thesis that an enterprises as an entities operating in the environment of other entities, which using a goods, should serve the interests of a broad group of a stakeholders. The article presents the concept of the CSR with particular emphasis on the needs of the stakeholders and ways of satisfying them on the example of Polish economic practice. According the data of research the enterprises in Poland pay attention on other groups of stakeholders (apart a customers) and take they into account in business practices.

Keywords: CSR, stakeholders, value for stakeholders, research's data

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Introduction

The concept of corporate social responsibility was entered to business practice at least over a dozen years ago. The enterprises that can boast of a responsible approach to business, preparation of social reports are, first of all, large corporations, very often of a transnational nature. Popularization of the concept, also by co-financing CSR activities (e.g. under the Swiss-Polish Cooperation Program) has caused that it is also increasingly noticed by small and medium-sized enterprises operating in Poland. Enterprises are increasingly aware of the need to care not only for customers, but also for other groups of stakeholders, ie employees, suppliers, media, public administration and the local community.

The purpose of the article is to determine the degree of responsibility and activities of enterprises addressed to each stakeholders. The article assumes that enterprises operating in Poland undertake additional initiatives (in addition to the conditions laid down by law) for individual stakeholders.

Place of the stakeholders and shareholders in the functioning of the enterprise

At the core of the concept of creating a value for a shareholders is the assumption that the company is a collection of capital resources owned by the shareholders. In practice, this means that the company is treated as the shareholders ownership and its main task is to provide value to its owners (Copeland 1994,

p. 8-30). According the assumptions that accompany this concept, the company's management staff should strive for two key objectives on behalf of shareholders:

- 1) generating the optimal level of dividend payments - profit for shareholders,
- 2) maximizing the market value of the enterprise.

In order for these goals to be mutually exclusive, the company striving to create a value have to be focused on maximizing the effects of investments so that the increase in capital employed causes more than a proportionate sales revenue (Howaniec, Waszkielewicz 2013, p. 228). Creating value for the stakeholders is exposed component as well as the attribute of business models (Brzóska, Jelonek 2015, p. 48) and managers should look for new instruments, which support the activities leading to increased efficiency of the organization (Brzozowska, Szymczyk 2017, p. 377).

The concept of interest groups is a competitive concept for the concept of enterprise's value growth. It assumes that the enterprises are not only for shareholders, but also for other interest groups, which include, among others, customers, employees, suppliers, media, public administration and the local community. According to this concept, business is treated as an integral part of society, not a separated field of a purely economic nature. The company's goal should therefore be to provide the value to all stakeholders, i.e. to balance the goals of all stakeholders and act in the interest of all groups.

Generally, groups of interest was divided into: internal ones, which can occur in particular departments, in various geographical locations, on different stages of hierarchy etc. and external ones, which are for example: customers, tradesmen, banks, professional relationships, state departments. We can also note division within groups of business into basic and secondary ones, with their social and beyond-social influence on the organization (Marcinkowska 2000, p. 20).

Taking into account above classifications, we can accept that the environment of firm consists of such groups of business as (Howaniec 2016a, p. 30).

- customers, who look on the enterprises by the prism of its market activities, brands, products, services, prices, promotion, publicities etc.,
- workers, who are interested in a work's conditions and facilities,
- suppliers, who are interested in honesty in cooperation and possibilities of common development of business – first of all they are interested in the rate of profits of cooperation, coming certainty from orders,
- media, which evaluate the firms by the prism of social business and administration personnel activities,
- public administration, which perceives the firms as a subjects creating work places and paying taxes,
- local community, which expects the responsibility in practise, regarding not only economic area, but social and charitable as well.

CSR vs. stakeholders

The beginnings of the concept of social responsibility can be seen in the academic works of the 80s and 90s of the last century (Preston, Post 1975; Ackerman, Bauer 1976; Carroll 1979; Freeman 1984; Wartick, Cochran 1985;

Miles 1987). This concept is also the subject of research by Polish authors (Rok 2001; Rybak 2004; Korpus 2006; Żemigala 2007; Geryk 2010; and Bartkowiak 2011; Skowron-Grabowska et al. 2016). Regardless of the degree of popularization, this concept has become the norm that determines the way companies behave on the market not only in developed but also in developing countries (Howaniec 2016b, p. 32).

Corporate social responsibility, also known as a corporate conscience, a corporate citizenship, a sustainable corporate business or, finally, a Responsible Business (Wood 1991, p. 691-718), is understood as a voluntary consideration of social and environmental aspects in a business strategies and operations. However, it does not mean only meeting formal and legal requirements, but investing in a human resources, protecting the environment and maintaining a good relations with the broadly understood enterprise environment.

The stakeholders' aspect is the second (beyond the social and environmental aspect) emphasized in the definitions of corporate social responsibility.

The role of the business is not only generating a profits, but is a duty to meet the expectations of the business environment and balancing the interests of the groups that operate in it. In addition to achieving business objectives, the company should also take into account the social and environmental goals in its strategy. Only this activity allows to take responsibility for the effects of industry (Howaniec 2015, p. 222). But the environmental awareness o management staff is unfortunately weak and insignificant correlated with the eco-effectiveness of environmental practices (Seroka-Stolka, Nowakowska-Grunt 2012).

Therefore, the implementation of the CSR concept in the practice of an enterprise should be associated not only with the provide of value to clients, but also to other stakeholders of the company.

Data and research methodology

Empirical studies were conducted in 2013-2015 on a sample of 180 enterprises from Silesia and Lesser provinces. The study was conducted in the form of a structured interview. Given the subject of the research used a convenient choice. After rejecting of invalid responses, the basis for the calculation were: 150 questionnaires. The sample characteristic is presented in *Table 1*.

Table 1. The sample characteristic [%]

Organizational position	Chief executive officer / Managing Director / Company owner	Chief marketing officer / Marketing department manager	Sales director / Sales manager	CSR specialist	Other
%	48,7	10,7	22,7	0,7	17,3
Formal status and structure of the company	Enterprise branch	One-company enterprise	Multi-company enterprise	Capital group	

%	10,7	70,0	12,7	6,7
Financial condition	Very favorable	Favorable	Average	Difficult
%	7,3	57,3	29,3	6,0
Number of brands	One	From 2 to 3	From 4 to 6	7 or more
%	52,0	22,7	14,0	11,3
The employment	Below 10 people	10 - 49 people	50 - 249 people	More than 250 people
%	48,0	29,3	10,0	12,7
Company's size	Micro-enterprise	Small enterprise	Medium-sized enterprise	Large enterprise
%	44,0	35,3	10,0	10,7
The form of company ownership	Private	The state	Cooperative	
%	93,3	4,7	2,0	
Ownership supervision	Domestic	Foreign	Mixed	
%	86,0	6,0	8,0	

Source: Own study based on empirical research. N = 150

Creation of value for stakeholders in the light of research

In the course of the research, the respondents were asked about the activity towards various groups of stakeholders. Analyzing the responses defining the actions taken by the companies for the benefit of clients, it can be clearly confirmed that clients constitute a special group for enterprises operating in Poland. In practice, this means, among others taking into account their expectations in planning and implementing marketing strategy.

The vast majority (almost 90% of asked) believe that they are honest to customers. A large group, because about three-quarters of respondents declare that they reliably mark their products (77%). A comparable number replied that they use a pure rules of market play (80%) and have complaint procedures available to consumers (80%). The respondents also believe that their products are valuable (75%) and apply the principles of fair sales and advertising (71%). Relatively many of the respondents apply certification confirming the quality of the products and services offered (63%) and as many as 62% believe that they reliably inform the customers. A very small number of respondents do not take special actions towards the clients, but this is only 4% of answerer (*Figure 1*).



Figure 1. The activities of the enterprises directed to the clients [%]

Source: Own study based on empirical research. N = 150

The enterprises operating in Poland pay large attention to employees. As many as 98% of respondents believe that they undertake additional activities for employees. Only 2% of responders indicated that they did not take specific actions in relation to this group.

According to the respondents entrepreneurs respect employees' rights - almost 90% of answers. They also highly assess compliance with health and safety standards and care for health and safety at work - 91.3% and improving safety in the workplace - 62%. Slightly less surveyed, but still very much - about 85%, think that good working conditions are provided. However, this group of activities is strongly related to the applicable provisions of law in the area of health and safety.

Almost half of the surveyed enterprises (48%) organize employee meetings (festivities, picnics). We can positive evaluate of the activity of enterprises in the area of employee training - as many as 62% declare that they provide appropriate training to employees. The respondents relatively high also assess the observance of the gender equality policy in access to promotion and professional development - more than half declare its use in decisions regarding the promotion of employees. A little more declares equal treatment of women and men when making decisions on redundancies - 54% of respondents.

Definitely below should be assessed employers' openness to dialogue with the representatives of employees (e.g. trade unions, works councils). Such actions was undertaken by only 26% of respondents. The care of employers for special conditions for children of employees is also evaluate low. Only 15% of employers declare taking up any activity in this area. The facilities for mothers are even worse. Only 12% of respondents take such actions (*Figure 2*).

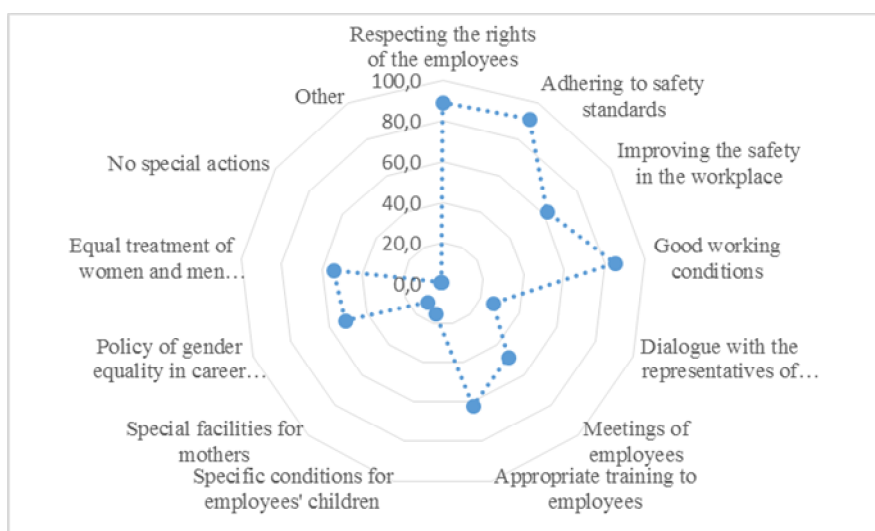


Figure 2. The activities of the enterprises directed to the employees [%]

Source: own study based on empirical research. N = 150

In relation to suppliers we can observe primarily compliance with formal or legal obligations. In the vast majority the respondents emphasized that they made payments on time and kept the contractual terms (85%). A much smaller part, because less than two thirds of the respondents together with the supplier solve problems related to deliveries or its development (58%) or monitor the growth of suppliers (55%). However, such actions should be very positively evaluated. It confirm the durability of the relations of the surveyed enterprises with this group of stakeholders. A large part of the answerers systematically contacts with the suppliers, informing them, among others, about development and activities undertaken in the company (44%), for some these are formal contacts, but a significant part declares maintaining non-business contacts (29%). To sustain positive relationships they often send greeting cards (25%) or passed small gifts (11%). A small number of respondents also indicated that they verify subcontractors in terms of corporate social responsibility (14%) or conduct educational activity in this area addressed to suppliers (10%) – *Figure 3*.

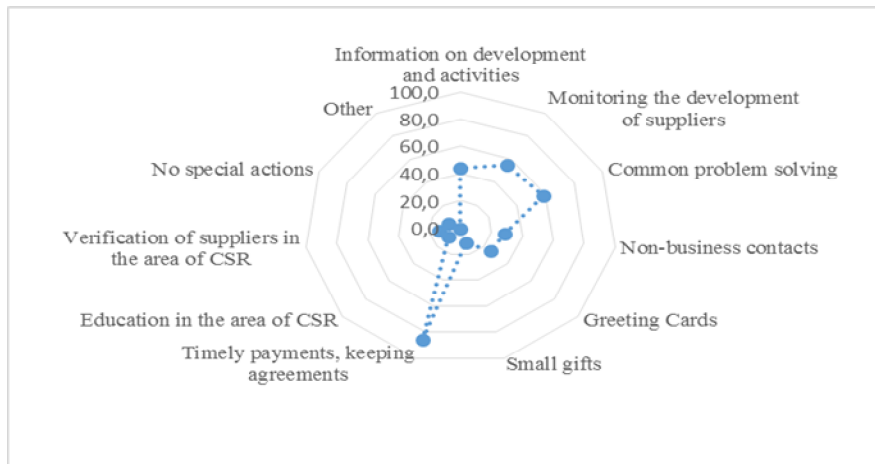


Figure 3. The activities of the enterprises directed to the suppliers [%]

Source: Own study based on empirical research. N = 150

Media are the less perceived group. As many as 61% of the respondents do not take any actions directed to this group of stakeholders. However, it should be emphasized, that the vast majority of respondents are small and medium-sized enterprises that do not creation PR in their everyday practice. What would seem surprising, about one fifth of the respondents are trying to systematically inform the media about the development and activities undertaken in the company (23%), a similar number informs about their activities, including in crisis situations (21%) and only 16% of respondents report on corporate social responsibility activities (*Figure 4*).

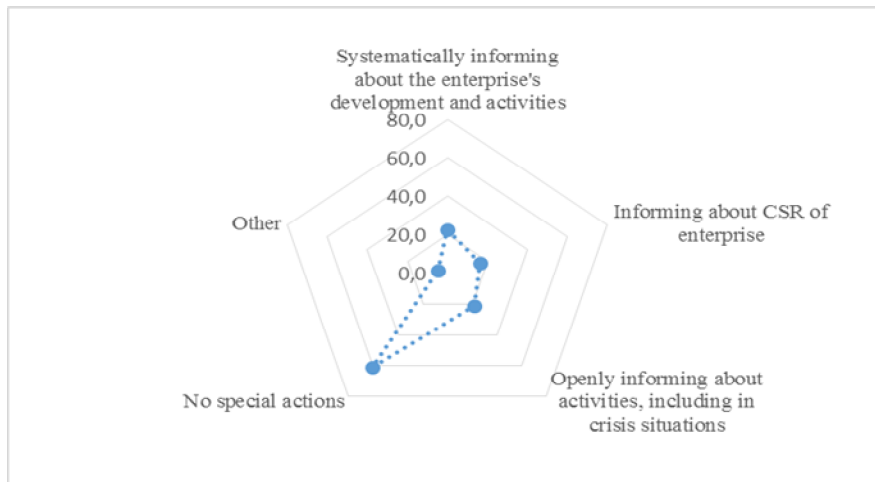
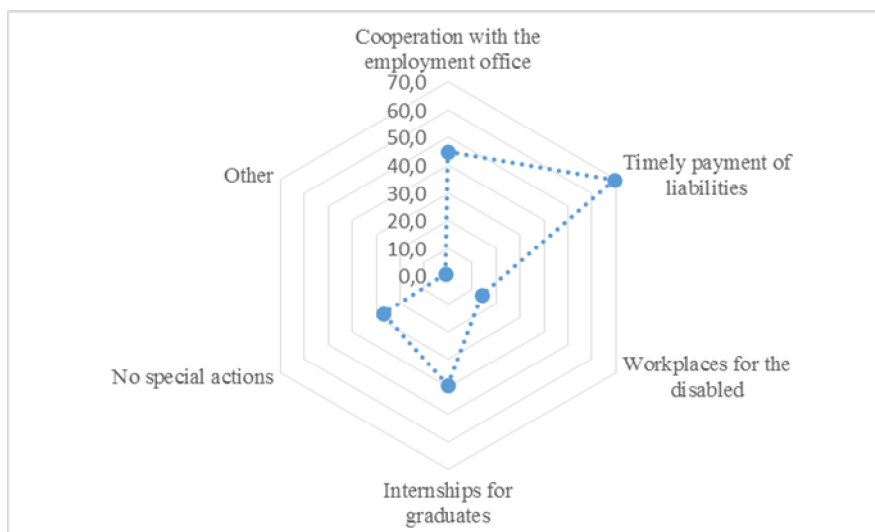


Figure 4. The activities of the enterprises directed to the media [%]

Source: Own study based on empirical research. N = 150

In relation to the administration can be also observed compliance with obligations imposed by law, i.e. timely payment of liabilities (69% of respondents). Although almost one third of respondents replied that they did not undertake any special actions in relation to public administration (27%), almost half declare cooperation with labour offices (45%), and two fifths employ graduate students for internships (39%). A small number also indicated job creation for the disabled



(14%) - Figure 5.

Figure 5. The activities of the enterprises directed to the public administration [%]

Source: own study based on empirical research. N = 150

Much more attention is paid by the entrepreneurs to the local community. As many as two-fifths declare that it takes into account the needs and opinions of the local community (42%), a similar amount uses sponsorship (39%). A quarter engages in charity (24%). For a significant part of the respondents, care for the local community is synonymous with limiting the negative impact of the company's activities on the natural environment (43%). In addition, the surveyed enterprises promote a pro-ecological behaviour (32%), conduct dialogue with the local community (18%), support employee involvement in social activities (18%) and run social or educational projects (15%). Unfortunately, these activities are not very popular. As many as a quarter of respondents do not take specific actions towards this group (Figure 6).



Figure 6. The activities of the enterprises directed to the local community [%]

Source: own study based on empirical research. N = 150

Conclusions

Changing the conditions of competition forces much more responsible approach of enterprises to all factors of production, i.e. human, natural and even capital resources. The CSR's concept assumes that the company should participate in the care of broadly understood human resources, including the local community, indirectly related to the enterprise, the environment and maintain positive, value-based relationships with all stakeholders.

The results of the research show that entrepreneurs operating in Poland also see the need to improve relations in all interest groups:

1. The vast majority of the enterprises declares that they are honest with their customers, reliably label products and apply pure market game rules.
2. The enterprises believe that they undertake additional activities for employees. They respect employees' rights, highly assess compliance with health and safety standards and care for health and safety at work.
3. The enterprises not only settle payments on time and keep contract terms with suppliers, but also try to create value-based relationships with suppliers, i.e. jointly solve problems, they sometimes monitor suppliers' development.
4. The enterprises devote a lot of attention to the local community, which means providing support through sponsorship or charity activities, but also trying to care for the natural environment, take pro-ecological actions, and even social projects.
5. The media and the public administration are less visible groups. Only a small part maintain contact with the media and inform them about the development and activities undertaken in the company. In the second case, cooperation is limited to cooperation with the labour offices.

To sum up, in the area of economic practice, Poland still catching up a developed countries of Western Europe or the USA. Much later there was also the popularization of the CSR's concept in Poland. However, today we can talk about a clear improvement in the responsibility of enterprises in relation to all stakeholders. Enterprises change attitudes towards clients, but take also additional initiatives for employees, suppliers or the local community.

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CSR A KSZTAŁTOWANIE WARTOŚCI DLA INTERESARIUSZY

Streszczenie: Pojęcie grup interesu jest silnie podkreślane przy definiowaniu koncepcji społecznej odpowiedzialności biznesu (CSR - od ang. Corporate Social Responsibility). Trudno jednak nie zgodzić się z tezą, że przedsiębiorstwa, jako podmioty działające w otoczeniu innych podmiotów, które korzystają z dóbr, powinny służyć interesom szerokiego grona interesariuszy. W artykule przedstawiono koncepcję CSR ze szczególnym uwzględnieniem potrzeb interesariuszy i sposobów ich zaspokojenia na przykładzie polskiej praktyki gospodarczej. Jak wskazują dane uzyskane z badań, firmy w Polsce zwracają uwagę na inne grupy interesariuszy (oprócz klientów) i biorą je pod uwagę w praktykach biznesowych.

Słowa kluczowe: CSR, interesariusze, wartość dla interesariuszy, dane badawcze



DEVELOPMENT OF ENTREPRENEURSHIP WITH SUPPORT OF LOCAL SELF-GOVERNMENTS, ON THE EXAMPLE OF BELCHATOW COUNTY

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Abstract: Every country aiming for the highest level of economic competitiveness, thereby providing a better standard of living for citizens and increasing their personal satisfaction, should support activities of businessmen and people, who want to rise the level of national economy with means of introduced innovations. The smallest national unit supporting the entrepreneurship is municipality. Activities of municipality have indirect or direct influence on local companies. It is particularly seen, that the chances for development of entrepreneurship in particular areas of country and creating regional development based on the entrepreneurship should be searched in the respectively led policy of local and regional government, particularly in relation to small and medium companies. Purpose of this thesis is characterization of entrepreneurship in Belchatow county, as well as initiatives of the county's government are being stipulated, in order to support the establishment of new companies and development of existing companies.

Keywords: local self-government, county, company, management

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Introduction

Entrepreneurship is generally an active, creative and innovative activity of human being in the economic and other than economic zone.

Every country aiming for the highest level of economic competitiveness, thereby providing a better standard of living for citizens and increasing their personal satisfaction, should support the activities of businessmen and people, who want to rise the level of national economy with means of the introduced innovations (Sopińska, Wachowiak 2016). Thus, economic affairs are more increasingly a key item in a strategy pursued on local and regional level (Skowron-Grabowska, Nowakowska-Grunt 2017, p. 97-98). Development of entrepreneurship particularly influences on the economic growth. Thus, the activities oriented on its stimulation and development are required. Entrepreneurship requires the respective stimulation with the established conditions enforcing eagerness for a business activity, what subsequently leads to starting and running a business activity (Lemańska-Majdzik 2012, p. 115-117).

The smallest national unit supporting the entrepreneurship is a municipality. Activities of municipality have indirect or direct influence on local companies. An increasing role of local self-government in the development of local entrepreneurship

is currently observed (Kubeckowa, Kurzak, Major 2017). A significant instrument being a driving force in local development, particularly from the moment when Poland entered into the European Union, are aid measures obtained by local self-government from foreign resources (Glinka, Gudkova 2011, p. 110-113).

The support of municipality for the entrepreneurship can be divided into two groups: income and expense instruments. Income instruments are various kinds of tax reductions and exemptions. They comprise of: agricultural tax, property tax, forestry tax, dog-ownership tax, tax for means of transport, inheritance and donation tax, business activity of individuals tax (Kot 2017, p. 54-56). The municipality's support for entrepreneurship begins with determination of tax rates, that are generally lower than the rates maximally determined by the Ministry of Finance. Whereas, a particular value depends from a municipality's budget. Municipalities support own citizens with means of remittance, payments in instalments, exempting a taxpayer the payment and collection of tax, or tax deductions (Nowicka-Skowron, Krawczyk-Sokołowska, Mesjasz-Lech 2017, p. 257-258). The most important element in expense instruments are investments, that influence on the increased investment attractiveness of municipality. Infrastructural investments are i.e. as follows: sewage system, (it improves the standard of living), bypass road (it can lead to the improved conditions for business activity) (Skowron-Grabowska, Nowakowska-Grunt 2017, p. 97-98). Many local self-governments use investments as a way for municipality's promotion.

Local self-government authorities can efficiently support development of economy, when creating beneficial conditions for such sector (Glinka, Gudkova 2011, p. 110-113).

Stimulation of local economic development with means of local self-government administration's activities on various levels is obviously well-grounded. It results from one obvious fact, namely companies do not operate in the void, they operate in a physical, social space, with a stipulated legal environment (Kot 2017, p. 54-56). No matter how private companies make independent decision on own matters, their chances for operation depend from many factors created by local self-government administration. Purpose of this thesis is characterization of entrepreneurship in Belchatow county, as well as the county's government initiatives are being stipulated, in order to support the establishment of new companies and development of existing companies.

Belchatow county

The climate supporting development of entrepreneurship in the municipality, being the factor required for economic development, is as follows: territories, human resources, infrastructure, chances for cooperation, chances for application of technology, as well as system of local charges and taxes (Nowicka-Skowron, Krawczyk-Sokołowska, Mesjasz-Lech 2017, p. 257-258). Whereas, additional factors are as follows: municipality's image, political stability, attractiveness of a city, efficient administration, recreations (theatre, sport), education and mentality of citizens. Current municipality management methods, conscience of the

municipality's government role, the municipality's government attitude towards the entrepreneurship and respective treating new and operating business activities by a municipality, all of this is of great importance for the climate supporting entrepreneurship (Brzeziński 2015, p. 5-7).

Belchatow county has many values supporting development of entrepreneurship. Belchatow county has generally a convenient localisation, it is located in the central Poland, in southern part of Lodz Voivodeship. It covers the area of 967.75 sq. km., what amounts to 5.31% of the Lodz Voivodeship area. It comprises of: the municipality of Belchatow city, the municipality of Zelow city and cottages, as well as cottage municipalities: Belchatow, Kleszczow, Kluki, Druzbice, Rusiec, Szczercow and the cities: Zelow and Belchatow (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016). National, county and voivodeship routes are crossing territory of Belchatow county. Natural resources are also located on this area. Tertiary deposits are located at territory of this county, existing in the form of layers, covered with quaternary formations (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016). Apart from deposits at territory of this county, also very numerous deposits of lignite are located there. Whereas, there are deposits of boulder clay, sand with grit, grit, marls of Upper Cretaceous, Aeolian sand (Roguta 2005, p. 16-20). Brown soils, podsolic soils, black earths, leached earths, swamp soils, alluvial soils are predominant on territory of this county. According to soil quality classification, municipalities located at territory of this county have very low conditions for agricultural crops (Roguta 2005, p. 16-20). Agricultural lands at territory of this county were in 2015 as follows: arable lands (40678.4 ha), grasslands and pastures (13602.1 ha), orchards (337.2 ha). Total area of farmlands amounted to 54617.7 ha, what amount to 56.4% of county's area. The county's hydrological network comprises of numerous rivers crossing the Belchatow municipality, and the longest river is Rakowka (21.9 km) (Urząd Statystyczny w Łodzi, 2016). The following reservoirs are located at territory of Belchatow county: Słok Lake, Smugi, Grobla, Święte Ługi Lakes, Duży i Biały Ług, Lubiec, Dziewuliny, Teresin, Fraszka, Imielnia as well as reservoir tanks: Słok Reservoir, Parkowy Reservoir, Wawrzkowizna Reservoir, Patyki Reservoir.

Entrepreneurship in Belchatow county

Government and public administration on various levels in the Belchatow county efficiently support the development of entrepreneurship and aim for the establishment of beneficial conditions in the surrounding for this sector, with simultaneous reduction of unwanted factors resulting from a play of free-market competitive forces (Romanowska 2015).

The activities pursued by local authorities in the described county are generally oriented on economic development. When the citizens are regarded, and particularly the investors, efforts oriented on development and creation of infrastructure are constantly made, as well as local spatial development plans are created. Currently developed plans generally cover residential areas and areas attractive for investments (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016).

Local self-government authorities promote the entrepreneurship and self-employment with means of various types of trainings, competitions, seminars, pursuing EU projects. Institutions oriented on supporting the development of local entrepreneurship also operate at territory of this county (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016). One project organized by Belchatow and by District Labour Office in Belchatow was a program called „Own company - a chance for success” (Starostwo Powiatowe w Belchatowie, 2016). This project was generally oriented for unemployed, who wanted to start own business. Competition was based on finding an interesting initiative influencing on the development of local entrepreneurship. It also helped in the acquisition of financial resources for establishment and shaping own company. Thanks to such initiative, 50 new companies have been established (Starostwo Powiatowe w Belchatowie, 2016). City also strengthens the spirit of entrepreneurship among the learning teenagers, with means of the organised project called “Good student - a firmer future” or “Knowledge is my chance” oriented on the increased professional qualifications in the scope of renewable energy systems and devices. The county’s development in the area of technical infrastructure was also of great importance for the increased economic and investment attractiveness in the region. In the years 2005-2015, new sewage treatment plants were constructed (what reduced contamination of surface waters and groundwater and improved natural environment), estate community heating networks were improved, gas network was expanded, communication and transport infrastructure was modernized (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016).

Belchatow, in order to stimulate the investors in planning investments at territory of this county, exempts businessmen from company tax, who have headquarters located at territory of special economic zone, as well as companies with averagely 15% of yearly employment increase. A special “Invest Planner” application was also created, that helped investors in finding an ideal localisation for own investment. A businessman can also benefit from the individual investor’s patron support, who helps in contacts with city office employees, helps in formalities related with business entity (Stowarzyszenie Animacji i Rozwoju Lokalnego, 2016).

Kleszczow municipality, having agricultural and industrial character, provides many labour opportunities for own citizens, as well as for the citizens from nearby municipalities. Major goal in the municipality’s activity is development of entrepreneurship. Kleszczow municipality is oriented on the acquisition of investors, promotion and development of local entrepreneurship. It runs trainings for citizens in the area of i.e. foreign language lessons, computer courses, it plays also a role of guarantee-loan fund. Kleszczow municipality participates in the national and international investment fairs, such us PROPERTY Investment Fair, Lodz Energy Fair or EXPO – REAL fair in Munich. The Municipality’s Office in Kleszczow offers legal and financial support in starting own business and its further development. It also cooperates with District Labour Office, in order to inform the investors about the chances for getting new qualifications or the chances for participation in various types of trainings, seminars and courses (<https://www.kleszczow.pl/>).

Municipality of Zelow and Foundation for Development of the Municipality of Zelow supports local entrepreneurship with means of granting access to the respective room for making business activities of businessmen, granting financial support and loans for newly established companies, as well as for their development; organisation of various competitions, that stimulate the entrepreneurial behaviour among young and skilled citizens of Zelow and the surrounding municipalities, i.e. "A chance for job - professional activation of people endangered with social exclusion", "Counteracting digital exclusion in the municipality of Zelow - we invest in the future" or "Development of small and medium company services: advisory and training services" (www.zelow.pl).

At territory of Belchatow county, institutions supporting development of businessmen entering onto the local market, as well as businessmen operating in many years, are operating. One such institution is District Labour Office. This institution has organised i.e. "First job programme", that covered five sectors: small and medium companies, education, self-employment, mediation in the employment/information/vocational counselling and volunteerism. 746 people benefited from this program, and 320 people got a job after the end of the program (Starostwo Powiatowe w Belchatowie, 2016). In the scope of "First job" program, "Green labour places" sub-program was organised, that provided opportunity for a trainee program in the Belchatow Forest Inspectorate. District Labour Office grants loans for businessmen, who start new business, as well as for companies that create additional workplaces. Percentage rate for a loan is considerably lower in such case, when compared to bank department.

Another institution is Department of Culture, Education, Health and Sport in the County Authority's Office (pol. Starostwo Powiatowe). It organises i.e. meetings for learning teenagers with office employees, where the following topics are discussed: labour market, course of a job interview, professional qualifications, methods preventing unemployment and searching for a respective job (Starostwo Powiatowe w Belchatowie, 2016).

Another institution promoting the entrepreneurship at territory of Belchatow county is Department of Promotion and Development of Entrepreneurship with its headquarters located in the Belchatow County Authority's Office. Department's tasks are as follows: promotional activities, making market analyses, coordination of activities with foreign contractors, cooperation with agencies and other units on the national and international scale within the framework of county's promotion, organisation of trainings, workshops for businessmen and for learning teenagers, free-of-charge support in the area of legal advices and formalities resulting from a business activity held (Starostwo Powiatowe w Belchatowie, 2015).

ARREKS Business Incubator located at territory of the municipality of Kleszczow pursues regional development of Belchatow county as a major goal, with particular emphasis on the promotion of entrepreneurship and organisational and technical solutions, creating of new workplaces, new organisations and support for companies from the sector of small and medium companies (<https://www.kleszczow.pl/>).

It grants consulting and training support for every type of company, irrespectively to its size. ARREKS Incubator grants working capital and investment loans for individuals and companies for launching new companies purposes, as well as a support for existing companies. The loans granted by Incubator are more beneficial for investor, when compared to the bank credit granted, as a result of lower percentage rate. The Incubator also supports the activities oriented on the creation of new workplaces/positions, with means of trainings for unemployed, who want to start own business activity.

Industrial and Technological Park of Belchatow and Kleszczow was established in 1993 and it pursues development of innovative offer, that meets businessmen expectations, as a main goal, what may facilitate the economic, efficient and beneficial business activity (Kubik 1998, p. 45-46). This organisation offers the investment areas and surfaces for rental, that are intended for business activity. It also grants free-of-charge consulting services in the scope of tax law, principles of registration and running a company etc. One project organised by Industrial and Technological Park of Belchatow and Kleszczow was "Innovation - a key to success". Main project goal covered "increase in the number of companies operating on grounds of innovative solutions". People from whole Poland could participate in such project, when they had an innovative idea and would like to start own business. Consulting services were provided in the framework of this project, with the following scope: establishing a new company (developing a business-plan, an analysis, researches), providing the services and infrastructure required for newly-established organisations (<https://www.kleszczow.pl/>).

Regional Chamber of Commerce operates at territory of Belchatow county, that represents and protects the interests of Chamber members, provides consultancy the services in organisational, economic, legal and training issues, that are related with running a business activity, it also creates and organises the respective conditions for settlement of disputes in the course of conciliation and amicable proceedings, it supports the economic development in the region, and particularly local and regional development of entrepreneurship. This Chamber supports the economic initiatives of own members, it promotes international and inter-regional business contacts, it modernizes business life, it creates conditions for development, it represents own members in contacts with governmental and non-governmental organizations, it supports cooperation initiatives with other educational and scientific institutions, it protects property of own members, it organises promotional events and fairs, it grants support in the acquisition of financing from the European Union (Starostwo Powiatowe w Belchatowie, 2016).

Also Economic Forum of Belchatow County is organised at territory of this county. Second edition took place in 2017. Three hundred people participated in this event, including the representatives of institution, local self-government, businessmen from various nationalities, from i.e. Ukraine, Germany, Lithuania. A major Forum task is meeting the companies for knowledge and experience exchange purposes, making business contacts, motivation and inspiration for further development (Starostwo Powiatowe w Belchatowie, 2016).

Structure of entrepreneurship at territory of Belchatow County

According to Central Statistical Office (pol. Główny Urząd Statystyczny – GUS) in 2015, 8,962 companies held a business activity, 238 were from public sector and 8,721 were from private sector. GUS classifies such business units in the Belchatow County in 8 sections, with regard to the occupied sector of economy (Urząd Statystyczny w Łodzi, 2016).

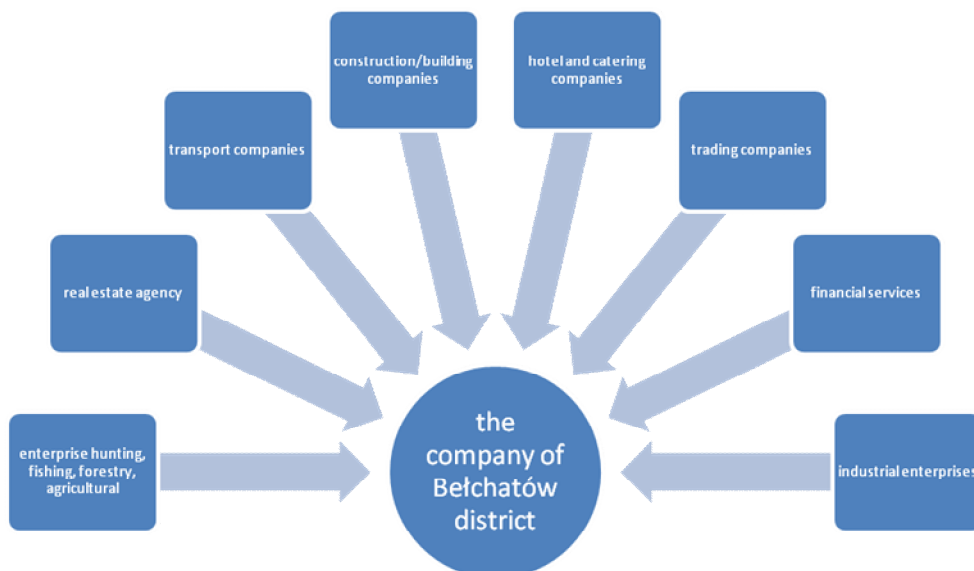


Figure 1. Division of companies from Belchatow County according to sectors

Source: Own elaboration according to GUS data (Urząd Statystyczny w Łodzi, 2016)

The largest company classified in the sector of industry, with the headquarter located at territory of Belchatow County, is PGE Górnictwo and Energetyka Konwencjonalna SA (PGE GiEK SA). This company is a concern from the PGE Capital Group (pol. Polska Grupa Energetyczna). PGE GiEK SA headquarter. The company's headquarter is located in a modern office building (commissioned to use on May 8, 2013) in Belchatow, Weglowa 5 street. PGE GiEK SA comprises of thirteen departments: Belchatow Power Plant, Turow Power Plant, Opole Power Plant, Dolna Odra Complex of Thermal Power Plants, Bydgoszcz Complex of Thermal Power Plants, Gorzow Thermal Power Plant, Rzeszow Thermal Power Plant, Lublin – Wrotkow Thermal Power Plant, Kielce Thermal Power Plant, Zgier Thermal Power Plant, Belchatow Lignite Mine, Turow Lignite Mine (Urząd Statystyczny w Łodzi, 2016).

Discovery of lignite at territory of Belchatow county in 1960 facilitated the establishment of Elektrownia BOT Bełchatów SA and Kopalnia Węgla Brunatnego BOT Bełchatów SA. It is currently the largest power industry complex in Poland (shortcut: BOT is derived from the names of following cities Belchatow – Opole – Turow).

Knauf Gips KG is one among the largest companies in the construction sector, with Knauf Belchatów Sp. z o.o. company located in Rogowiec, at Gipsowej 3 street (municipality of Kleszczow). Knauf department in Belchatow has three plants: for gypsum plasterboards, construction chemistry and gypsum plasters.

Companies handling with repairs of vehicles are decidedly predominating in the sector of commerce. The sector of transport and warehousing in Belchatow county is based on the companies from transport industry: Emaus Logistics SC, Aspen Company, Miejski Zakład Komunikacji Sp. z o.o., Przedsiębiorstwo Produkcyjno-Handlowo-Usługowe Batis Sp. z o.o., Transport Towarowy Gabriel Fiszer.

The sector of accommodation and gastronomy is the most developed sector amounting to about several-dozen companies.

Sector of real estate market services is dominated with Belchatow real estate agencies. Biuro Obsługi Nieruchomości "Nieruchomość" is one of the oldest in this sector of industry. Companies from the financial and insurance sector are generally local departments of national and international financial institutions. It particularly covers banks. At territory of Belchatow county i.e. the following companies run a business activity in this sector: Getin Noble Bank SA, Bank Spółdzielczy, Bank BPH SA Oddział Belchatów, Bank Ochrony Środowiska SA Oddział Operacyjny Belchatów, Bank Spółdzielczy w Kleszczowie, Bank Polska Kasa Opieki SA Oddział I (wraz z dwoma filiami), ESBANK Bank Spółdzielczy Oddział w Kleszczowie, Alior Bank Oddział w Zelowie, ING Bank Śląski SA Oddział w Belchatowie, Invest-Bank SA Oddział Belchatów, Bank Crédit Agricole Oddział Belchatów, Bank Pocztowy Oddział Belchatów, Bank Zachodni WBK Oddział Belchatów, neoBANK Oddział Belchatów, Bank PKO BP Oddział Belchatów, Bank PKO BP Oddział Zelów (Urząd Statystyczny w Łodzi, 2016).

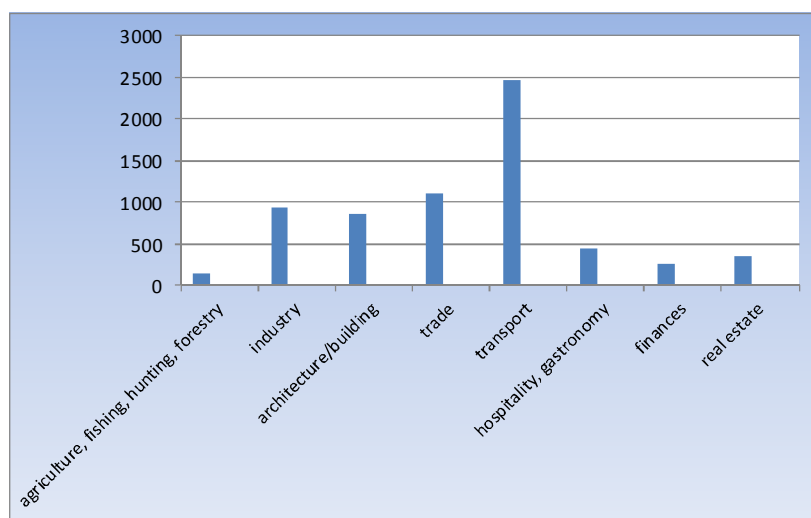


Figure 2. Size of companies in Belchatow county, with respect to the sector of business activity

Source: Own elaboration according to GUS data (Urząd Statystyczny w Łodzi (2016)

Activity in the sector of insurances is pursued by i.e. the following companies and agencies: Powszechny Zakład Ubezpieczeń SA Inspektorat Belchatów, UNIQA Towarzystwo Ubezpieczeń na Życie SA, UNIQA Towarzystwo Ubezpieczeń SA, AXA Ubezpieczenia, Agencja Autoryzowana TUiR Warta SA, Agencja Usług Finansowo-Ubezpieczeniowych Alina Hyżak, Vesta Pośrednictwo Ubezpieczeniowo-Finansowe (Urząd Statystyczny w Łodzi, 2016).

With respect to division into 8 sectors, according to the criterion applicable in GUS researches, in the year 2015 the number of companies in particular sectors was as follows: 141 companies in the sector - agriculture, forestry, hunting and fishery; 934 companies in the sector - industry; 860 companies in the sector - construction; 1112 companies in the sector - trade, repairs of vehicles; 2472 companies in the sector - transport and warehousing; 455 companies in the sector - accommodation and gastronomy; 267 companies in the sector - financial and insurance activity; 356 companies in the sector - real estate market services. From all companies registered at territory of Belchatow county, in 2015 the largest group of companies was in transport and warehousing sector and vehicle trade and services sector (Urząd Statystyczny w Łodzi, 2016).

Conclusions

Development of entrepreneurship is required for the provision of economic growth. At the same time, efficiently operating companies induce competitive force in a particular region. Thus, the respective activities are required, that form supporting conditions for starting and running a business activity, as well as the activities supporting development of currently existing companies. Responsibility for the execution of activities stipulated above is generally borne by local self-government.

Belchatow county authorities orient own policy on the economic development, with application of city's investment assets and its beneficial localisation in the central Poland, good access to the communicational infrastructure. Belchatow is located at territory abundant with natural resources, thus the county's self-government introduces many tools encouraging investors for starting and making activities at this territory. The following undertaking supporting development of entrepreneurship, from all tools available, has operated the best: Scientific and Technological Park. Tax reliefs for businessmen are also important.

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ROZWÓJ PRZEDSIĘBIORCZOŚCI PRZY WSPARCIU SAMORZĄDÓW NA PRZYKŁADZIE POWIATU BĘŁCHATOWSKIEGO

Streszczenie: Każde państwo chcące osiągnąć jak najwyższy poziom konkurencyjności gospodarczej, a przez to zapewnić obywatelom lepszy standard życia i tym samym zwiększyć ich osobiste zadowolenie, powinien wspierać działania przedsiębiorców oraz osób, które chcą podwyższyć poziom gospodarczy kraju poprzez wprowadzanie innowacji. Najmniejszym organem w kraju wspierającym przedsiębiorczość jest gmina. Działania gminy mają pośredni lub bezpośredni wpływ na lokalne firmy. Szczególną uwagę zwrócono na to, iż szansą dla rozwoju przedsiębiorczości w danych regionach kraju i dla kreowania rozwoju regionalnego opartego na przedsiębiorczości należy upatrywać w odpowiednio prowadzonej polityce władz lokalnych i regionalnych, szczególnie w odniesieniu do małych i średnich przedsiębiorstw. Celem niniejszej pracy jest dokonanie charakterystyki przedsiębiorczości powiatu bełchatowskiego oraz wskazanie inicjatyw władz powiatu, których celem jest wspieranie powstawania nowych i rozwoju już istniejących przedsiębiorstw.

Słowa kluczowe: samorząd, powiat, przedsiębiorstwo, zarządzanie



INTERNSHIP IN LOGISTICS SEEN FROM STUDENTS' PERSPECTIVE

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Abstract: Logistics is an area where practice is particularly important and appreciated. In the their studies, students shall, in accordance with the programme of study, carry out internships which are to give them appropriate practice and experience. The article is the first part of two parts of the study, which aims to identify how logistic students perceive student internships and apprenticeships in a broad sense as work in the company. In this section, an attempt will be made to answer the question how students perceive and evaluate student internships and what should change in the attitudes and relations of the three stakeholder groups involved in internships: students themselves, companies and universities. The materials for the research were provided by two surveys conducted among students of the logistics faculty of one of the Polish universities.

Keywords: student internships, practice in logistics, didactics in logistics

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Introduction

Student practice is an integral, very important part of education. It is an essential element of student's vocational training for future job. It is the opportunity to gain personal experience and to develop practical skills based on theoretical knowledge (Pike, Kuh and Massa-McKinley 2008).

As a result, many students choose to continue their practice beyond the program of their studies, on their own, just to gain experience and additional skills that will result in getting interesting job in the future. Professional internship during the studies prove an individual's adulthood and ambition, who adopt quickly in the company, cooperate better in a group, has no problem with operating within the framework.

Unfortunately, it happens that students decide for the practice accidentally, or choose an employer who does not require much. Many of them do not consider the choice of an interesting company, do not want to spend time on researching the market (Kabus, Nowakowska-Grunt, Kościelniak 2017). They look for an employer who only issues a certificate of practice. This is one of the major mistakes students make, and employers point out that lack of business practice is one of the main problems that often disqualify a candidate for a job (Tłuczek 2012).

Aim of the study

The article is the first of two parts of the study which aims to identify how students of logistics perceive student internship and apprenticeship in terms of - broadly understood - work in a company. In this part, an attempt is made to address the question of how students perceive and evaluate student internships and what should change in the attitudes of and relations between the three stakeholder groups involved in internships: students themselves, companies and universities.

The logisticians entering the labor market from the students' perspective

According to the results of the research "Start on the labor market" (2016), the most important barrier to entry into the labor market, from the students perspective, is the lack of experience (74%), which can be understood as a shortage of widely understood practical skills. Important barriers include also too high employers' requirements (51%), too few internships and trainees (42%) and lack of knowledge about the labor market (38%).

More than half of students (57%) have already taken compulsory internships/practice, and 39% have participated in optional internships. The opportunity to take up internships at the university/faculty is quite often dependent on huge effort (39%), which indicate their poor promotion or insufficient acquaintance (19%) - only 15% of students admit that simply they are available. According to another group of students, internships are difficult to access (20%) or even inaccessible (6%).

Twice as many students (32%) perceive the appropriability of internship compared to the group of opposite opinion (15%), more than half of them evaluate practice ambivalently. This is related to the quality of traineeship (Cichoń 2013) rather than the negative assessment of this form of experience gaining. It can be hypothesized that the course of these traineeships is not satisfactory so they do not meet the objectives set.

Therefore the approach of the students is important - the correct course of study, the high level of activity during their studies, and the quick access to a career path. Fortunately, over 93 percent of the students who took part in the study conducted by the Praca.pl web portal believe that best start for the career is during the studies. Over 55% of respondents assume it should take place in the first or second year of studies ([http://www.praca.pl/...](http://www.praca.pl/), 2017).

Nearly 60 percent of the students' surveyed has recently completed traineeship. Most of them, as almost 38 percent, did not benefited much from them, but did not recognize that time as completely wasted. 14% of the respondents claim that upon this experience acquired they got a dream job and have learned a lot. Only 12 percent of respondents evaluated their practices as worthless. Every third of the respondents, through their practice, developed their competences and gained valuable experience. According to more than half of the respondents in the study conducted by Praca.pl web portal, the most important during the practice is gaining

experience and knowledge. Students also appreciate ambitious tasks and the opportunity to work with experienced experts, but do not count on getting to know new people and building a business network (<http://www.praca.pl/...>, 2017).

According to universities' graduates employed in logistics companies, the most important activity in preparing for finding a job was to practice in logistic companies during the holidays starting from their first year of studies. Often they have had their first experience in other industries. The certified knowledge of a foreign language was also significant. Apart from preparing an interesting resume, the most predominant action in the search was finding a large number of job offers or practices. They were looking for them by attending various types of job fairs, by reviewing the offers posted by the College Career Office and available on the website. The first work is usually a positive surprise, although it is not exactly the same as imagery about it. Young graduates often emphasize that flexibility and adaptability to new conditions and goals are important in logistics, even if they differ from previous expectations (Trochymiak 2012).

Accordingly when the first contact with the labour market occurs after graduation, it is definitely too late. Preparations to do the first job are best to start early, even while studies. This is getting more and more easy, especially since most large logistics companies offer summer practice programs and it is sufficient to discern and apply respectively to take part. Unfortunately, young people make use of this proposal rarely. Such an initiative requires to devote the part of a holiday for work and, as a rule, these practices are unpaid. Students often do not realize how much they lose by not taking advantage of such employer proposals. According to S. Gołuchowska from the Raben Group, usually young people would like to be well-perceived in the labour market, but take little active action to take care of it (Trochymiak 2012).

At the same time, only 13 percent of the students assess the labour market as open to the young people. As much as 36 percent of the respondents poorly evaluate the labour market. According to them, employers require a great deal of expertise and young people do not have a chance to work satisfactorily - according to the *Praca.pl* survey conducted among the students (<http://www.pracujwlogistyce.pl/...>, 2017).

Characteristics of the study sample and methodology

The study sample comprised the students of the last year of their degree course in Logistics. Their age average is between 22 and 26; thus they belong to the so-called Generation Z. It is a generation of people born after 1990, who enter the labour market with ambitions and aspirations, often perceived as excessive in the eyes of previous generations. They find it difficult to accept employment in less prominent and less paid jobs. Young people of Generation Z believe that having a university diploma secures a good job and therefore they often struggle when confronted with the reality of a highly competitive labour market. This results in denying the value of the university diploma and means that young people have to look for other solutions. Very often, graduates start their studies with dreams and ambitions, and eventually they land a full-time job in a place where they do not

really want to work. Many of them abandon their qualification to work elsewhere, and it is natural for them to change jobs (Mathur, Hameed, p. 63). It is common to have retraining and temporary work both at home and abroad. Employers value flexibility and adaptability. At the same time, Generation-Z graduates are highly computer literate and live with the Internet and in the Internet. They are not actually in demand on the labour market because due to their young age, lack of experience and impatience they are not considered as being attractive for the employer. The modern generation also has a communication problem and their interpersonal skills are at a low level. The reason for this is a lifestyle in which the virtual world plays an important role and new technologies limit interpersonal relationships (Skrzydłowska-Kalukin 2015). Generation Z are also competing for jobs. It is a generation of individualists who move and act alone on the labour market and are determined to pursue their own personal success.

However, Generation Z, modern and computer literate, has an enormous potential. A high level of computer skills and the use of modern, abstract technologies is an advantage in a number of workplaces and industries.

The material for the study was provided by two surveys conducted among the students of the Faculty of Logistics at one of the Polish universities. The first one is carried out every year as part of the faculty's system of improving the quality of education as a mandatory element of the procedure concerning student internships (Survey 1). This year, 120 students of the last (third) year of bachelor- and general engineering-degree courses, and extra-mural studies took part in this survey. However, this survey was treated as an auxiliary material. The second i.e. main survey was conducted specifically for the purposes of the present study and covered 64 students in the last - 2nd year of the second-cycle i.e. Master's degree course in *Logistics* (Survey 2). The survey comprised 18 questions. The authors deliberately chose not to determine correlations between variables such as gender, as the study sample does not seem sufficiently representative to allow conclusions to be drawn with regard to such correlations. Some of the questions formulated in the survey use the method of semantic differential and Likert's scale; however, several closed questions were formulated as well.

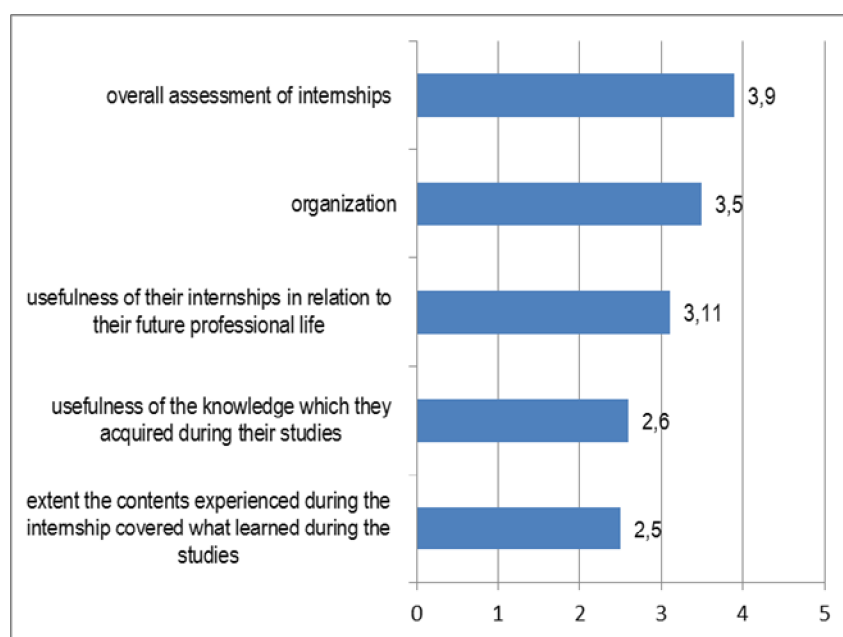
Analysis and results of the surveys and discussion

The first question asked in the survey was about having any hands-on work experience in a company, and here 12.5% (8 people) responded that they had not had any such experience. Of those who declared such experience, 53% received remuneration for the work which they did. Among the departments and positions named by the students as the places where they gained professional experience were mainly the sales and logistics departments, followed by departments of quality control and customer service, administration, production, production optimization and transport, and also positions of a freight forwarder, a warehouse worker, a consultant, a driver, and a road inspector. The job tenure in 31% of the respondents was one month. Longer internships - from 2 to 6 months - were selected by 21% of the respondents in total, and 28% of them have had hands-on

experience ranging from one to seven years. It is worth noting that 71% of all the respondents claim to be willing to work in logistics after their studies. Students find companies in which they do their internship either on their own or being recommended by family, friends or acquaintances. There was only one person out of 120 people questioned in Survey 1 who declared to have chosen a company upon their University's recommendation. In all cases, the type of the company's business activity was in line with their field of study. The same was also the case with Survey 2, which was carried out for the purposes of this study.

The aim of the first part of Survey 2 was to examine how students evaluate student internships. Since they are a compulsory element of the first-cycle studies, it was assumed in the Survey that all respondents had completed such internships. The few negative answers to the question about having had any hands-on experience need to be interpreted as misunderstanding of the essence of internship, especially that having or having had a part- or full-time job exempts students from doing internships, and it is therefore likely that students who have been in employment said that they were not in internship.

The way in which students perceive internships was examined in five areas, i.e. general evaluation of internships, their organization, usefulness for future professional life, usefulness of the knowledge gained during internships, and the overlap of the degree course content with internship content. The distribution of the



results is shown in *Figure 1*.

Figure 1. Evaluation of internships

Source: Authors' own research

First, the students were asked to give an overall evaluation of internships. The evaluation was done by marking it on a semantic scale (0 – I am not satisfied with the internship, 3 – I am moderately satisfied with the internship, 6 – I am very satisfied). The average overall assessment of internships was 3.9. The respondents also evaluated the usefulness of the knowledge which they acquired during their studies during their internships. This time, also on a semantic scale (0 – the knowledge was not useful, 3 - the knowledge was moderately useful, 6 – the knowledge was very useful) the students awarded an average score of 2.6 for the knowledge usefulness. In another question, the respondents were asked to assess the internships in terms of organization and were given the following scale: 0 – very weak organization, 3 – average organization, and 6 – very good organization. On average, the students rated this aspect at 3.5. According to a similar pattern, the students assessed the usefulness of their internships in relation to their future professional life by placing the answer on a scale of 0-6 (0 – not useful at all, 3 – moderately useful, 6 – extremely useful). The average evaluation for this particular aspect was 3.11. The last question was about the overlap between the content of the knowledge acquired during studies and the contents of internships. Again, on a semantic scale, the students were supposed to indicate to what extent the contents that they experienced during the internship covered what they had learned during their studies (0 – there was no overlapping content at all, 3 – there was a moderate overlap of contents, 6 – there was a full overlap of contents). On average, the students rated the extent of the overlap at 2.5.

On the basis of the students' evaluation of internships, it should be stated that in general students are satisfied with the internships, and they also think them to be fairly well organized. For a large group of students it was the first contact with an enterprise, and also with the organizational side of the enterprise; hence their high ratings. The overall satisfaction with internships results from the satisfaction coming from the learning process confronted with the practical problems and the fact that combining theory with practice convinces learners about the usefulness of knowledge, taking actions and their effectiveness, and that it is one of the fundamentals of the cognitive process. In individual interviews, the students often express general satisfaction with the internships and they emphasize that they are an important and appealing element of their education. It should also be stressed that the satisfaction with the internships and their good overall evaluation is clearly linked to their duration. In general, the longer students are in internships, the greater satisfaction they feel, which is evidently connected with the feeling of performing tasks which are perceived as necessary. This is also confirmed by the other surveys conducted as part of Survey 1. Every year, a survey in which students evaluate internships in their organizational, practical and theoretical terms with the highest rating (this year the rating in all three aspects was at 5.0) awarded to internships by the students who have often had longer internships i.e. apprenticeships in companies and thus have more hands-on experience.

At first glance, the evaluation of the knowledge gained during the studies and the overlap between the contents of the studies and the contents of the internships

may seem rather interesting. First of all, it might suggest that it is necessary to introduce more practical training in classes conducted during studies. On the other hand, a certain disappointment in these aspects may be due to poor choices made when choosing a company or position for the internship. This may also be due to the students' misunderstanding of the role of degree courses and universities and their own role in the preparations for entering the labour market. This attitude reveals a shift in the *self-direction vs. conformity* axes towards *conformity*, which means that the respondents are of the opinion that the university is fully responsible for how well they prepare for their profession. This dichotomy, well-known in the sociological sciences, and fluctuations between the two abovementioned extremes, can often be noticed in this type of research.

The last question related to the internships was about the areas that the students learned only during internships and what they found surprising. The answer to this question is illustrated in *Figure 2*.

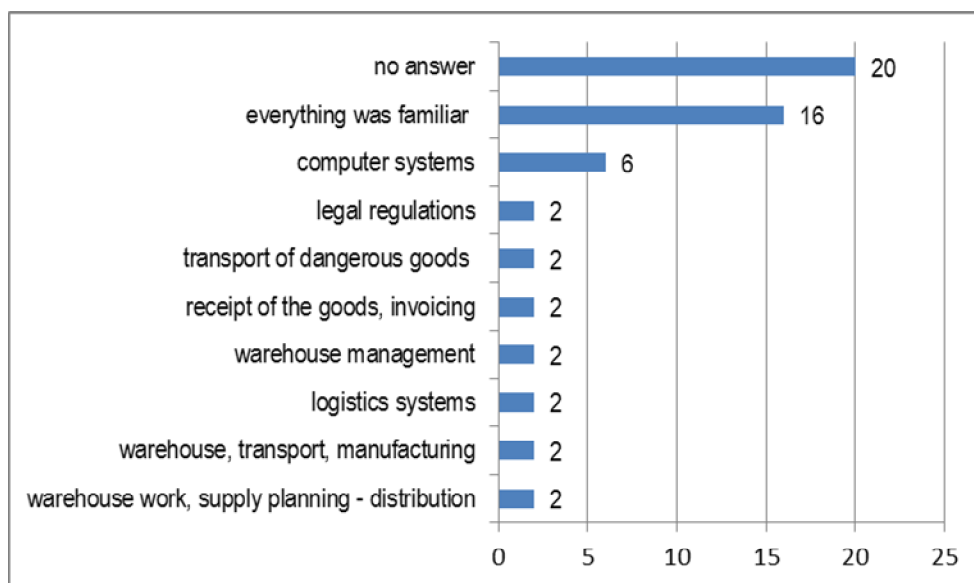


Figure 2. Areas that the students did not learn until completing the internship

Source: Authors' own research

As many as 20 people did not mention a single factor or any area in their response, and 16 people said that they were familiar with everything during the internships. Very few respondents reported various aspects and scopes within a number of different fields including legal regulations, transport of dangerous goods, invoicing, etc. Such distribution of answers suggests that the students felt quite confident during the internships and, although in the preceding questions in the survey they did not assess quite positively the usefulness of the knowledge they gained during their internships or the overlap between the contents of their studies and internships, it can be concluded that they were sufficiently prepared to be

familiar with most aspects and issues. It can also be concluded that the companies in which the students did their internship were very cautious and the students were appointed to perform tasks which proved to be well below their actual skills and abilities. It is in point of fact difficult to imagine that there were no tasks or aspects in a company that would be new to students, which a few specific replies would suggest. These must have been the answers of those who had been assigned more difficult and more responsible tasks and who therefore experienced obstacles and discovered their shortcomings. Of course, there is also a large group which either provided negative answers or did not answer the question because they happen to be generally reluctant to provide more exhaustive answers.

Conclusions

Student internships are a most significant element of education, of which students are fully aware. However, their assessment of internships – despite being generally fairly positive – in individual areas is not very high and students seem to have been disappointed with that particular experience. In order to increase student satisfaction at this stage of education, different ways of communicating between all three groups – universities, students and entrepreneurs – should be considered and revised. Firstly, students should be made aware of the current situation on the labour market in the logistics industry and should learn to shape their attitude in order to be ready to assume greater responsibility for their own career and success in finding the right job. It would also be useful to consider better communication with companies offering internships as they should be provided with more extensive information about students and the degree course which they are doing. Ideally, those companies could also be expected to show more trust in students' abilities, which eventually would translate into entrusting them with more demanding tasks during internships in which they could demonstrate their actual strengths. Undoubtedly, it is the duty of universities to continue to adapt the content and teaching methods of higher education to market needs. However, universities should not be blamed for student disappointment.

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PRAKTYKI STUDENCKIE W LOGISTYCE Z PERSPEKTYWY STUDENTÓW

Streszczenie: Logistyka jest dziedziną, w której praktyka jest szczególnie ważna i ceniona. W trakcie studiów studenci odbywają zgodnie z programem studiów praktyki studenckie, które mają dać im odpowiednią praktykę i doświadczenie. Artykuł jest pierwszą z dwóch części opracowania mającego na celu rozpoznanie, w jaki sposób studenci logistyki postrzegają praktyki studenckie oraz praktykę rozumianą szeroko, jako pracę w przedsiębiorstwie. W niniejszej części podjęta zostanie próba odpowiedzi na pytanie, jak studenci postrzegają i oceniają praktyki studenckie oraz co powinno zmienić się w postawach i relacji trzech grup interesariuszy uczestniczących w praktykach: samych studentów, przedsiębiorstw i uczelni. Materiału do badań dostarczyły dwie ankiety przeprowadzone wśród studentów kierunku logistyka jednej z polskich uczelni.

Słowa kluczowe: praktyki studenckie, praktyka w logistyce, dydaktyka w logistyce



TECHNOLOGY AS A FACTOR OF THE DEVELOPMENT STRATEGY OF INDUSTRIAL COMPANIES

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Abstract: Each way of gaining new technology has its advantages and disadvantages. In any case, the company should estimate the costs of acquiring a new technology, taking into account the technological growth, the possessed opportunities of the machine park and its finances. Companies must take development initiatives to take over technology with full awareness of their own objective capabilities. In any case, one should not overestimate one's capabilities. One can not put people in a position to make decisions or manage events that go beyond their knowledge.

Keywords: innovation, competitive advantage, technology

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Introduction

A company in the market economy that wants to exist in the industry should systematically carry out a restructuring process that will consist in developing and adapting to the changing conditions that have taken place in the environment. Designing a strategy without prior and accurate balance of opportunities, threats and weaknesses and strengths of the company will not be effective and reliable. The ideal solution for such an operation is to carry out a proper analysis to examine and then confirm the way and direction of the organization's operations compared to the competitive environment and its changes. This allows for the introduction of appropriate technology in both organizational and technical issues, ie introducing appropriate innovations.

Determinants of enterprise strategy selection

The processes of formulating an effective and realistic company strategy are connected with taking into account many factors determining the choice of strategy. The choice of methods and method of development depends, among other things, on the existing and future potential of the given enterprise. It allows to determine the strategic ability of a given company, ie the possibility to develop, implement and operate an effective development strategy. This is determined by the culture of the organization, the ability to manage using both, tangible and intangible resources (Dobiegała-Korona, Jasiewicz 2000, p. 89). The company's

resources are everything that is at its disposal and can affect its functioning. On the other hand, the potential of competitiveness is a resource that the company should have at its disposal to build, strengthen and maintain its competitiveness (Adamkiewicz-Drwiłło 2002, p. 99-100). This is presented in *Figure 1* which builds the competitive potential in a two-stage division of resources. The potential of competitiveness is the basic, within the organization, reservoir of sources of competitive advantage, hence it allows to determine the relevant main dimensions, ie type, size and durability to a great extent (Porter 2011, p. 62-77).

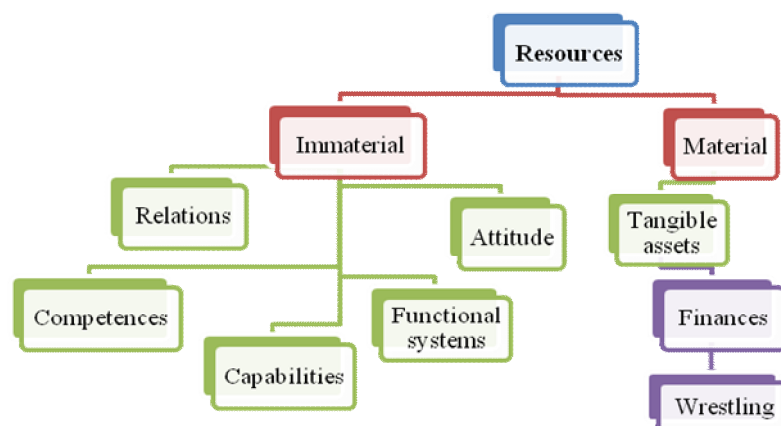


Figure 1. Schematic of resources present in the company

Source: Own study based on (Stankiewicz 2005, p. 105)

Competitive potential is a collection of resources that are used to achieve the set goals. It is a system that should be composed of subsystems that fulfill certain functions, thanks to which it is possible to achieve the system's goals. The emphasis is put on the best adaptation of the strategy to the company's strengths (Bossak 2006, p. 249). We rely on the competitiveness that we are able to maintain, expand thanks to our resources and competence. On the other hand, it is important to remember about the high level of difficulty of following the chosen strategy by competitors. This rule requires that the company chooses an advantage that is not yet used by competitors and can it defend it effectively (Borowiecki, Dziura 2016).

A separate group of factors determining the selection of the company's strategy are factors identified in the environment. The ability to use an opportunity is an important source of competitive advantage. There are different ways to develop a company that are often based on the use of opportunities. The basis for the company's development may be a strategy in the so-called opportunity language (or / and taking into account its structure of the opportunity ex ante) (Romanowska, Troicki 2002, p. 154-156). The combination of factors from the enterprise's area, strengths and weaknesses, as well as factors from the surrounding area, i.e. opportunities and threats, may take various forms and intensities. This allows us to distinguish four model strategic situations of the company.

The maxi-maxi strategy applies to situations where the company's strengths stand out, and opportunities play a significant role in the environment (Filipczak 2008, p. 23). Enterprises in this situation are characterized by strong expansion and diversified development. An example of such a situation are companies that have large production potential and modern technology. Such a company may, with a dynamically growing market, both invest in new products and enter new market segments (Żabiński 2000, p. 33). The mini-maxi strategy defines an enterprise in which there is an advantage of weaknesses over strong ones, but the arrangement of external conditions favors this company. The company should then reduce, correct internal shortcomings while taking advantage of opportunities. An example of such a situation are enterprises which, through a strategic alliance, try to take advantage of opportunities related to opening new markets, decide on their poor financial situation. The maxi-mini situation is disadvantageous for the company due to the poor arrangement of external conditions (Krupski 2014, p. 58). The action that overcomes this situation may be the use of its strengths and internal potential through a good competitive position, which in the conditions of shrinking demand, decide to apply the strategy of eliminating the purchasing or being purchased by competitors. The mini-mini strategy describes a company that has no development opportunities, operates in an unfavorable environment, and its potential for change is negligible. Such an enterprise has no strengths to fight threats and improve its weaknesses. This strategy often leads to liquidation of the enterprise or its increased efforts to survive (Krupski 2014, p. 58).

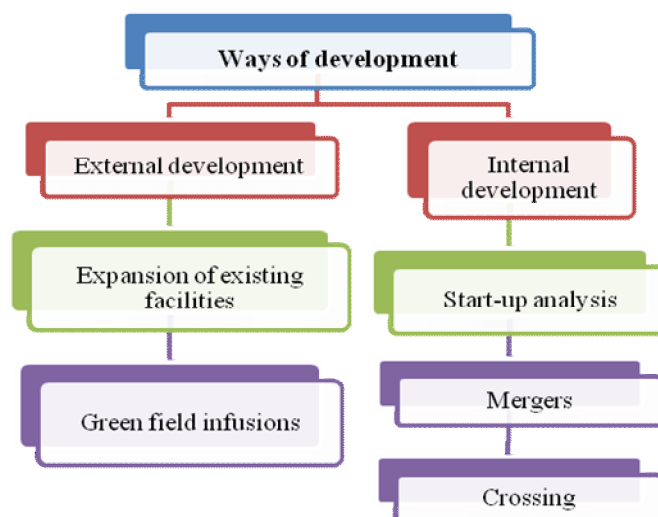


Figure 2. Ways of enterprise development

Source: Own study based on (Romanowska 2004, p. 201)

The growth of an enterprise can be achieved in two main ways, the expansion of the company from the inside and outside (*Figure 2*). Internal growth is defined by the fact that the main role is played by investment, still it is not the only factor. So often this form of growth is called investment one. External growth is primarily based on connections, which can be said as integrative, and potential investments as additional factor. This growth is called integration growth (Houben, Lenie, Vanhoof 1999, p. 126).

Internal development is a process that is primarily about expanding the company's potential. This is usually done by extending an existing company, for example by increasing employment, performing necessary repairs, investing in new production lines, and investing in new technologies or production organization methods. This process can be realized through greenfield investments that involve building a new company from scratch and attaching it to the parent company's capital or organizational structure (Lichtarski 2005, p. 245). Competitive advantage, despite being seen outside the company, is carried out inside the company. The internal roadmap of the development strategy consists of appropriate combinations of company strengths. These factors determine the ability of corporations to compete in the domestic and foreign markets. Knowledge and risk management must be taken into account so that we are able to recognize changes in the environment. Identifying changes allows you to adjust your goals, mission, and strategy. This has surely influence on the realization of the intended investment projects, the way of personnel management, quality or creating the appropriate organizational culture (Lichtarski 2005, p. 245).

The main criterion that divides growth from the outside is the economic potential. This is the way to treat the traditional way in which the company grows from the inside. The main roles are investments that enable greater tangible and financial or almost non-investment ways to achieve internal growth, including:

- increased production shift system,
- improvement of production, supply, inventory management and better use of machines,
- introduction of low-cost product and market innovations (Zastempowski 2010, p. 55-60).

The key factors in the implementation of the company's growth strategy are investments in the aspect of efficiency as well as finances and economy. Through the efficiency aspect, we understand that the process should allow the creation of the best combination of production factors. By the financial and economic aspect, we mean emphasizing inflows and expenses related to investments. Considering both aspects, the property owned by the company should be taken into account as its size determines the type and scale of the investment.

Most often the concept of investment is used as an increase in capital in relation to the stream of payment, which starts with expenditure, hoping that in the future receipts will exceed the former. Enterprises in a market economy invest market capital, e.g. in:

- securities - indirect and financial investments,

- property, plant and fixed assets - direct and tangible investments,
- staff training, R & D activity - material investments,
- other enterprises, resources, plans (Janasz, Koziol 2007, p. 60-62).

This shows the evolution of the company's approach to investment, ie infrastructure development, modernization or the construction of new branches of a given enterprise.

Technology in the mechanism of creating competitive advantage

The competitive advantage of a company is due to a number of factors that such company implements in the design, manufacture, distribution and after-sales support processes. Competitiveness depends on many elements as well as internal and external mechanisms. The company does not have much influence on external factors because they are determined by the environment. Internal factors and mechanisms are the responsibility of the company (Nowodziński, Skowron-Grabowska, Kościelniak 2017, p. 16-18). These mechanisms should be used to gain and strengthen market position through appropriate management. This enables us to distinguish the basic conditions of correctness of the methodological approach to the competitiveness of a company: uniformity of the vision of competitiveness,

- separation of successive levels of competitiveness,
- comprehensive approach to the sources of competitiveness,
- consistency in related levels as well as internal consistency (Koziol 2004, p. 60-62).

Uniformity in the vision of competitiveness means adopting one theory at a given level, or accepting different theories, but not contradicting ones. Competences are important, which is the development of the activity capacity to the ability to create a commitment and purposeful engagement and active use of resources in achieving the desired effect. This determines the appropriate premises of sources of competitive advantage:

- architecture - internal and external relationships of a company that define relationships with suppliers, employees, competitors and customers,
- reputation - that is, how customers perceive a business,
- innovation - means the creation of new products, technologies and methods by the company,
- strategic resources (Mizgajska 2002, p. 54-55).

Technology is one of the factors that determines the competitiveness of a company in the mechanism of creating competitive advantage. It is also possible to divide the technology by the scope of its use in the enterprise. From this perspective, four types of technology can be distinguished (Pomykalski 2001, p. 13):

- core technologies - widely used in a company, used in all companies with no competitive advantage,

- key technologies - technologies that currently provide competitive advantages (gaining and operating such key technology, reducing costs and increasing the flexibility of the manufacturing process, which include strategic and technology goals),
- development technologies - technologies in a state of development which use in current production is limited, but the prospects for their effective participation in competitive battle are promising,
- emerging technologies - technologies that are only emerging are in the given stage,
- research and trials (Mizgajska 2002, p. 65).

The company is motivated to technological changes through internal factors (created in the organization) and external factors (created under the pressure of the environment). Taking into account the first type of factors, the company's chances for success and the possibility of undertaking its own initiative are estimated, which means undoubtedly the asset of the entrepreneur. Opportunities are always perceived through the individual economic benefits in the form of income and profits increased or maintained at the current level. External factors may also affect the change of technology, the most important sources of change are legal, economic and social ones (Lemańska-Majdzik, Okręglicka 2017, p. 45-46). Often, these factors encourage or even force the company to make the right number of changes. From the entrepreneurs' point of view, these changes must take place due to changes in the environmental conditions (*Table 1*).

Table 1. Factors and mechanisms of creating a competitive advantage

Auxiliary functions		
Strategic management of the enterprise		
Human capital management		
Implementation of marketing strategy		
Technological strategy		
Environmental protection		
I	II	III
A focus on cost leadership	Innovation and innovation management	Marketing management
Own R & D and design	Organization of management	Technology and organization of production
Time management	Knowledge management, staff training	Personnel and personnel management
Logistics management		
Creativity		

Basic functions

Source: Own study based on (*Oslo Manual* 2008, p. 48-65)

Larger relationships of science and industry also forces the changing nature of technology, which is complex and systematic. This means that companies must be able to solve complex problems with more variables. This leads to the creation of knowledge in enterprises, which is not only specific, but depends on the development of complementary and sometimes basic fields of science. In response to such companies' needs, many fields of knowledge arose, including theory, methodology and measurement methods, useful in solving complex problems. Companies are becoming more and more multi-tech and include many areas of knowledge in their problem solving mechanism (Kiełtyka 2017, p. 35). The flow of patents, numbers or product development in knowledge-based industries complements both scientific research and commercial activities. Links between science and industry can therefore be measured, among others through learning intensity (dependence on science) of individual industries related to a given technology or technological system.

The role of innovation

Enterprises can take advantage of these opportunities, which are sources of innovation, these are: unexpected opportunities, eg unexpected success or failure, unexpected external events, discrepancies between reality and imagination, innovation resulting from the needs of the process, changes in the structure of industry or market structure that surprises everyone, demography, changes in perception, moods, values, and knowledge, both in the field of exact sciences and others (Kiełtyka 2017, p. 32). The requirements of the environment, forcing the appearance of innovations in enterprises, include factors such as shortening product life cycles, strong competition from other enterprises, value migration based on changing areas of activity and entering new promising markets, blurring industry boundaries, technology development information technology contributing to the emergence of new forms of business, company organization and sales channels, thanks to the possibility of smooth data and information flows and globalization, which using the Internet and modern means of communication makes local enterprises more and more elements of global cooperative networks. Knowledge, talent and employees' time are the most valuable resources of the company in the face of increasing complexity and variability of the environment. Due to the ownership of the resources by the company, we can talk about the potential of internal and external innovation, i.e. the ability to effectively implement innovation (Milecki 2004 p. 24). One of the basic conditions for the functioning of each enterprise is to have adequate capital to run a business. Each company decision has its impact on its financial situation. The financial resources involved constitute a mechanism that drives the functioning of each enterprise. Without the appropriate amount of capital, it is not possible to develop or even to keep the enterprise on the market. The amount of financial resources for innovative activities depends on the type of business activity (Wojtowicz, Koziol 2012, p. 211-223).

Proportions and financing period are different depending on whether it is a production or service activity. The methods of financing and the amount of capital resources obtained, which the enterprise needs to start innovative activities, depend on many factors, including the size of the enterprise, the form of ownership, the type of technology used and, above all, the project being implemented. Therefore, one perfect and universal method of financing an innovative activity can not be presented (Nowicka-Skowron, Pachura 2009, p. 45). It should be remembered that the methods of financing depend on various factors, for example on the type of enterprise or financial possibilities of the company. It is much more difficult to obtain long-term financial support for investment and development activities. Barriers of entry of private investors into the project, the possibility of exiting investments and profit taking, and the state of the institutional and legal infrastructure are factors determining the supply of capital for innovative activities. The essence and importance of innovation can be characterized as follows:

- the function of innovation is to introduce novelties in the economy, which in effect leads to development,
- the development of knowledge leads to innovation, and in turn innovations force the development of knowledge and scientific and technical progress,
- innovations have become the engine of progress in the economy and society,
- more and more often, innovations are the result of mutual relations between network participants in which knowledge management takes place,
- creating and implementing innovations related to changes in the organization or market becomes more effectively due to the organizational solutions in the form of networks in which innovative activity is carried out; they include clusters and science and technology parks,
- innovations implemented in organizations increase their competitiveness on the market, increase of the innovativeness of regions and countries leads to economic development (Dolińska 2010, p. 45-47).

The main goal of each company's activity is to make a profit and multiplication of capital (Barańska-Fischer 2005, p. 20), but this can not be achieved without the company obtaining a proper position on the market and then maintaining it. This, in turn, most often requires a proper development of the scale of operations and its profitability (Nowakowska-Grunt, Strzelczyk, Sałek 2017, p. 26).

Due to the fact that innovations form an integral part of the company's functioning mechanism, it is necessary to include them in the adopted operating strategies that set the goals of its operation. These goals can be divided from the point of view of different criteria for their differentiation. The *Table 2* presents an attempt to specify such a specification of the company's innovative activity goals.

Table 2. Objectives of the innovative activity of the company

Activity area	Innovative activity objectives
Production	Ensuring enterprise development. Increase in profit. Multiplication of the enterprise value (important for joint-stock companies). Providing new products to the market. Ensuring greater competitiveness of products on the market. Acquiring new domestic and foreign recipients. Improvement of product quality and functionality. Increase of the company's prestige. Other.
Production technology	Modernization of the company's technical base. Increased material and energy savings. Providing better health and safety at the workplace. Better use of expensive and hard to reach materials and raw materials. Minimization of environmental threats. Other.
Organization and management	Better adaptation to changing market needs. Increasing work efficiency and effectiveness. More efficient use of work posts. Rationalization of employee employment in the enterprise. Better use of machines and devices in the enterprise. Reduction or elimination of extraordinary losses in the enterprise. Improving in-house transport. Other.

Source: Own study based on (Brzeziński, p. 25-31)

Investment activity can be treated as a basis for introducing innovations. However, the creation and implementation of innovations should be associated not only with investments but also with the company's right capacity.

Conclusions

Polish enterprises that want to survive on the market should concentrate on searching for new, more advanced and effective solutions. Achieving a competitive advantage is only possible by adjusting to the changes taking place in the company, as well as in its environment. However, it should be remembered that implementing innovations in any company requires time and financial resources. Innovation is possible with simultaneous sustainable financial development of the company, thanks to which the company will have adequate financial resources, which will be devoted to the implementation of new, necessary technological investments. Enterprises should realize that innovative activities and continuous improvement of the company are now the key to overcoming competition.

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TECHNOLOGIA JAKO CZYNNIK STRATEGII ROZWOJU PRZEDSIĘBIORSTWA PRZEMYSŁOWEGO

Streszczenie: Każdy sposób pozyskania nowej technologii ma swoje wady i zalety. Przedsiębiorstwo jednak powinno oszacować koszty związane z pozyskaniem nowej technologii, biorąc pod uwagę wzrost technologiczny, posiadane możliwości parku maszynowego i swoje finanse. Przedsiębiorstwa muszą podejmować inicjatywy rozwojowe w celu przejścia technologii z pełną świadomością swoich własnych obiektywnych możliwości. W każdym razie nie powinny tych możliwości przeceniać. Niewłaściwym podejściem jest stawianie ludzi w sytuacji podejmowania decyzji lub kierowania zdarzeniami wykraczającymi poza ich wiedzę.

Słowa kluczowe: innowacyjność, przewaga konkurencyjna, technologia



MANAGEMENT OF THE TERRITORIAL UNIT IN THE ASPECT OF SUSTAINABLE DEVELOPMENT AND SOCIAL ECONOMY

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Abstract: Nowadays, the social economy responds to the economic crisis as a result of over-liberal free-market policies and criticism of the "welfare state". In turn, the most common goal of sustainable development is to increase the well-being of the community as well as of individuals in the context of a harmonious relationship between man and nature. The economic aspects of local development are always linked and interdependent with social aspects.

The purpose of the study is therefore to demonstrate, based on literature research, how important it is to include in the management of territorial units (Territorial Units) the idea of social economy as well as sustainable development.

Keywords: social economy, sustainable development, management of territorial units

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Introduction

Social economy proposes active forms of help rather than passive ones, it points to the need for co-responsibility instead of the claim and expectation of assistance, civic mobilization instead of the bureaucratic system, and thus becomes an important ally of the state in creating and implementing social policy.

The most common goal of sustainable development is to increase the well-being of the community as well as of the individuals in the context of a harmonious relationship between man and nature. Another objective is to satisfy the physical and psychological needs of a human being by properly coordinating his / her relationship with the natural environment, as well as satisfying the basic needs that are needed to achieve a well-balanced quality of life through proper physical and mental development. It also aims to combat poverty by increasing employment, improving food security, fighting discrimination and securing social security for all (compare: Wielgórka 2016, p. 178).

The most common goal of sustainable development is to increase the well-being of the community as well as of the individuals in the context of a harmonious relationship between man and nature. Another objective is to satisfy the physical and psychological needs of a human being by properly coordinating his / her relationship with the natural environment, as well as satisfying the basic needs that

are needed to achieve a well-balanced quality of life through proper physical and mental development. It also aims to combat poverty by increasing employment, improving food security, fighting discrimination and securing social security for all (compare: Wielgórka 2016, p. 178).

The economic aspects of local development are always linked and interdependent with social aspects. Economic development is subordinated to the obvious attainment of specific social objectives. It is also conditioned by social factors of development and vice versa. It is also often impossible to distinguish the symptoms of economic development from social development. At the social level, local development manifests itself primarily in improving the level and living conditions of the community. In turn, the level of living of local communities is mainly determined by the income that determines the extent to which local community members can afford to meet their needs. Living conditions in turn are created by the quantity and quality of local facilities that meet social needs. This is mainly due to positive changes in the components of local infrastructure (example: health centers, educational and cultural facilities, sports and recreational facilities) (see: Kudłacz 2008, p. 109). Taking into account the tasks that local authorities face today, they can be described as "a well thought out and structured set of management actions that include setting objectives and objectives for the organization, obtaining and implementing measures in an efficient, effective and socially responsible manner, monitoring the results achieved to ensure their functional balance and compliance with the needs of the recipients within the constraints of the environment in which the territorial unit operates" (Pabian 2013, p. 197).

The idea of social economy

The term "social economy" first appeared in France in the early nineteenth century. For a long time, this term was broader and less definite than today. A more precise concept of social economy emerged at the end of the twentieth century. At present in the economy and in politics, the third sector is emerging, acting in addition to the profit-oriented aggressive private sector and the social sector. Nevertheless, the name and shape of this sector and the understanding of the term "social economy" may vary from country to country (Defourny, Develtere 2008, p. 16).

Actions consistent with the idea of social economy are new and old at the same time. The social economy companies of the nineteenth century, most often in the form of cooperatives, had the task of helping each other's members and allocating some of their profits to the local community. At present, the social economy should be understood in terms of entrepreneurship based on willingness and ability to assume responsibility for their destiny. It should also be understood as a form of civic engagement in local affairs and taking responsibility for the community. Responsibility and self-organization are key terms. Accountability in the economic sphere means actions for the greatest possible self-reliance and economic sovereignty. In the philosophy of social economy this will mean that individuals,

organizations or whole local communities will be able to make sovereign decisions on goals and ways of achieving them in their activities. Social economy is changing the attitude of individuals, organizations and whole communities to social issues. This concerns attitudes to their own problems, which need to be resolved through entrepreneurship rather than demanding or waiting for help, and this is mainly through collective action rather than individual action. This also applies to the overriding goals of the community over the particular goals of individuals or groups. "These actions are based, to a large extent, on solidarity and cooperation, not on particularism and competition" (Wygnański 2009, p. 5).

The concept of social economy (also called social economy or solidarity economy) is a term that is quite debatable and defined in different ways and in different aspects. For example, on the one hand, it is indicated in the definition of organizational forms and, on the other hand, the normative aspects relating to the common principles governing social economy entities are signaled (compare: *Krajowy Program Rozwoju ...*, 2012, p. 6). J. Defourny and P. Develtere define social economy as follows: "Social economy encompasses all types of economic activity carried out by enterprises, mainly cooperatives, associations and mutual benefit societies which comply with the following principles in their ethical norms" (Defourny, Develtere 2008, p. 25):

- presenting the community of intangible property preferences in relation to profit;
- autonomous management;
- democratic decision making process;
- values of people and work in relation to capital.

Social economy can be seen in two ways:

- 1) as an alternative to purely market-based solutions based on free competition (aggressive capitalism) and the model of the welfare state (socialism);
- 2) as a specific method of market participation - evolving forms of business without the disadvantages of companies operating on the basis of free market competition, and eliminating the flaws in administrative regulations to introduce social justice (compare: Hausner 2008b, p. 11-12).

In the last century in the industrialized world, the three main types of formal and legal social economy corresponded to three main types of organizations: cooperative enterprises, mutual assistance societies and associations, whose form and legal status differ significantly in different countries (Defourny, Develtere 2008, p. 21). Social economy requires a great deal of value and principles. These are: solidarity, entrepreneurship (Kościelniak, Skowron-Grabowska, Nowodziński 2017, p. 14), commitment, responsibility and mutual assistance. The principle of creating effective mechanisms of empowerment and independence of individuals, organizations and communities is the most important. Social economy can also be seen as a set of organizations linked by the idea of achieving social objectives using market instruments. The institutions that derive from the so-called. old social economy (example: cooperatives) and non-governmental organizations as well as completely new forms (example: social cooperatives).

Individuals perceive the role of this trend in the socio-economic and cohesion policy. Social economy in various forms appear in almost all countries of the world, both poor and rich, more or less democratic, religiously tolerant and theocratic. Also a fully commercial business is trying to act in the social economy to reach its products and services to the poorest. Also in the environment of NGOs looking for economic mechanisms of self-reliance for their actions and effective solutions for their charges, social economy is becoming increasingly popular. This makes the idea of social economy as a promising way of solving social problems and is becoming more and more popular. It should be used as an important element of the anachronistic modernization often of the models of the welfare state (more: Wygnański 2009, p. 5). "Today we turn to the social economy in response to the crisis and the criticism of the "welfare state". It is not by accident but by the rule that where "welfare state" has grown and public health systems have become popular, the traditional forms of social economy have weakened and diminished, particularly in relation to all mutual societies" (Hausner 2008a, p. 4). Social economy does not have to be "rich" and "profitable," but it must be capable of generating an economic surplus in order to fulfil its social mission. Only then will it become an alternative to traditional social policies, referring to "redistribution" rather than to "production" (see: Hausner 2008a, p. 4).

In social enterprise there are processes of formation of a specific feedback. It operates through the use of economic resources based on trust and cooperation based on social relationships, in other words, from social capital, but at the same time its activity increases the capital. Therefore, social enterprise is an essential element of social economy. Its purpose is not only the production of goods and services but also the activation of social capital, innovation and entrepreneurship, but also the inclusion in the sphere of economic and social life of persons and communities so far excluded. It is an element of market economy, but a specific element. Its mission and objectives are largely located outside of the commercial market. Unlike a strictly commercial company, it participates in a market economy on completely different terms. A social enterprise not only generates additional goods and services but, more importantly, generates additional demand from the people involved. Social enterprises do not aim at market expansion, but without them, the market could not expand and develop over time. A social enterprise cannot, of course, be the most important form of market economy, but it is necessary as a complementary form without which a market based on a pure competitive game would exclude many of them from the market (*Kompendium wiedzy ...*, p. 3).

Social entrepreneurship is just one way to define an economic activity that combines social and economic goals. Social economy does not work against the free market, but tries to draw from it instruments for achieving social goals. The adjective "social" in economics points to the fact that a market economy is not an end in itself, but always has a social character. The area of activity of social economy entities lies in two spheres: offering social services and creating jobs for people with disabilities. In each case, the composition of these variables depends on the conditions and capabilities of each organization. "Acting in this area not

only generates surpluses that can be used to achieve social goals, but also their activities generate specific social values. So, in short, we are talking about social economy subjects that they work "not for profit", it is not just that the profit generated cannot be shared among the participants of the organization, but also that profit-making is not their goal, and that it is to create certain values. If there is a profit, then it is a secondary effect, not a goal" (Hausner 2008a, p. 4).

Social economy is an increasingly important part of the economy and it is the creator of a large number of jobs in the country and in the world. This is particularly true for services, including social services, which, unlike products, cannot be produced in low-cost countries. Already in the EU, the social economy sector is a collection of almost a million institutions that together account for about 11 million jobs and generate about 10% of GDP. In Poland we can talk about the collection of over 90 thousand. Institutions providing over 0.5 million jobs (*ManifESt ...*, 2008).

According to the research (Hausner (ed.) 2008c, p. 26), the most important development factors - forms of support for social economy enterprises are according to the interested parties:

- direct subsidies - for 90% of entities is the most desirable form of supporting their activities,
- preferential loans and loans - an indication to enable these companies to use certain funds, particularly when liquidity is lost.

On the other hand, a small proportion of the surveyed companies is interested in other forms of support (example: preferences for obtaining public contracts (26%), free information and advisory services (22%), and finally the possibility of using loan guarantees or guarantee funds (18%)).

In contrast, the basic barrier categories include:

- the accumulation of negative social and economic characteristics in non-industrialized regions,
- lack of confidence in the actions taken by these companies,
- low level of social activity and entrepreneurship in many local communities,
- negative attitude towards social enterprise as an organization acting in the sphere of social exclusion,
- perception of social enterprises as suppliers of low quality goods and services,
- lack of confidence on the part of other parties to create partnerships and cooperation for the realization of social and commercial goals,
- lack of cooperation between these companies on the local market.

The surveyed people often point to the image of social enterprises as a major obstacle preventing or significantly impeding business activity (75%). Many respondents state that by hiding the social nature of their business, it is much easier to find a worker or a customer. It should be noted that only a few entities expressed interest in introducing mechanisms that would form the basis of closer commercial business cooperation between market actors and social enterprises.

It should be noted that the labour market is a market of a specific commodity, i.e. labour. This commodity, in comparison with other market items, has one unique characteristic of subjectivity. A particular subject in the labour market is the individual employee who makes individual decisions about the direction of education, the specific type of job, the specific employer or the change of place of work (Słocińska 2013, p. 156). One should also pay attention to the very special labour market, which is the labour market for people with disabilities or other socially excluded. The local social environment should be equally friendly and for these people. This is also the case with the principle of internal justice, which is mentioned in the reflections on sustainable development. As indicated by the research (Gadzinowska 2016, p. 136-137), as the main obstacle to the employment of people with disabilities in our country, the respondents themselves are reluctant to employ the disabled. In addition, the respondents point to problems with commuting to workplaces and non-adaptation of workplaces for people with disabilities. Among the significant obstacles to the functioning of the disabled on the labour market are the bureaucracy (documentation connected with the PFRON subsidy), lack of legal regulations concerning people with a disability certificate, lack of coordinated cooperation between institutions acting for the benefit of persons with disabilities.

Sustainable development in the aspect of social policy

Sustainable Development is very often closely associated with the protection of the natural environment. Ecology is an important factor, but the issue of sustainable development is much broader and concerns the human environment in many areas. A. Pawłowski (Pawłowski 2009, p. 988) distinguishes seven such areas: 1 - ecological area; 2 - social area; 3 - economic area; 4 - technical area; 5 - legal area; 6 - political area; 7 - ethical area. This is related to the views of writers on social economy, where local development is also most often interpreted within well-defined areas, showing the relative homogeneity of the phenomena they create. The basic areas are: economic, social, cultural, political, ecological, spatial. There is no theoretical justification for the hierarchy of the above components. Their rank is the consequence of the assumed assumptions, referring to the purpose of the evaluation, and above all the specifics of the examined territorial unit (Kudłacz 2008, p. 108).

The ecological area, which is relevant to the environment, is an important element of the general human environment, and its dominant position is the result of rather a certain fashion for ecology and the importance of environmental protection in recent years. It is not the result of the natural hierarchy of individual areas, but is due to the perceived threat of water pollution, air degradation of forests, etc., which may be the future of man and of all nature on Earth.

The natural environment of man is not only the natural environment but also the social environment. Man is a social being. It was through the ability to interact with other members of the community that it was possible to create a modern civilization. So the discussion of which of the aforementioned areas is more or less

important seems unnecessary and suppose that the social area is equivalent to all the others. Let us remember, however, that, in line with the idea of sustainable development, we make the best use of, and at the same time, let the future generations reserve the most important resource, human capital, in the best possible condition.

The ethical and social planes are closely linked. This plane not only refers to the proper (ethical) use of man from natural resources, but also to the social environment. It must be noted that the moral capital of many social circles is decisive in both the strength and weakness of individual regions. The sense of social bond, kindness, honesty, patriotism, and finally resistance to corruption are the characteristics that distinguish individual territorial units and represent their significant assets in a competitive market. This territorial unit should be an attractive place for the aforementioned stakeholders, both in terms of nature and society. Many territorial units do not have special natural values, yet they are attractive regions for inhabitants as well as for investors. These regions are distinguished by their economic value, which is most often accompanied by access to all cultural, health and commercial services. In plain language: in these cities or regions, all social groups (including socially dysfunctional) are better off than elsewhere.

The concept of sustainable development is a way of ensuring harmony between economic growth, in terms of purely economic and environmental improvements. Moreover, this strategy extends the concept of the environment to such elements as access to education, health care system and cultural development for all social groups (including people in various socially handicapped ways). These elements also create quality of life alongside the surrounding nature. Defining the environment and emphasizing the need to improve its quality changes in the way of measuring the level of social wellbeing. Using only economic measures of well-being does not reflect many important social factors (Brendzel-Skowera 2009, p. 102).

The idea of sustainable development is best expressed by the 1987 Report of the World (WCED), which states that sustainable civilization is possible at the current level of civilization, and that this way of meeting the needs of the modern generation does not diminish the needs of future generations. From this definition it follows that:

- the issue of meeting the needs of present and future generations,
- the need to meet needs must have lasting character in the multi-generational dimension.

Justice for the modern generation aims at reducing global inequalities between the rich north and the poor south, while on a regional scale it aims to compensate for disparities between the various social groups. Intra-generational justice, on the other hand, is meant to provide equal access to all inhabitants of the individual territorial units, which meet all human needs (material and immaterial job satisfaction) and to education, culture, health care etc.

In contrast, intergenerational justice speaks of the need to preserve both the natural environment and the economic and social environment in a state that will

allow future generations to create attractive living conditions or invest in a given area (and globally, worldwide).

Any initiative for sustainable development should depend to a large extent on the will of the stakeholders of a given territorial unit and in relation to their values. It is the community of a given area that decides what it means for sustainable development. The concept of multigeneration means, in general terms, the long-term maintenance of the required characteristics of people, entire communities and individual organizations and the surrounding environment. Consequently, no definition of sustainable development can be applied to all communities (see: Dobrzańska 2007, p. 50).

The balance between inner-generational justice and intergenerational justice indicates that the use of particular environmental resources (natural, economic, social) to ensure that the present generation does not feel that their lives are under worse conditions to preserve resources for the benefit of future generations. We cannot talk about sustainability - even if we maintain the highest standards of environmental protection or optimum use of economic and human capital - if the stakeholders of a given territorial unit do not feel adequate satisfaction from life, work or investment. It is therefore necessary to adopt such parameters of economic and social development that will not lead to social dissatisfaction and the feeling of not meeting the needs of individual people and entire communities (compare: Chrzan 2015, p. 118).

Management of territorial unit (TU) in the aspect of social economy and sustainable development

The management of a territorial unit is, inter alia, increase the competitive capacity of a distinct space, which may be a city, a municipality or a region. The space should be equipped with efficient technical and social infrastructure as well as institutions supporting business activities. It should have strong and extensive internal and external relationships. It is also a well-managed space for which a long-term, strategic development program exists and is being implemented. The ultimate goal of any business is not to make money, but to meet social needs. There is no organization that does not meet any social needs. However, the need is associated with demand, which is accompanied by equivalent purchasing power. As a consequence, the needs of people or communities with low purchasing power are not met and even ignored.

In such cases, the local authority (state or local government) must take over the role of the provider of goods and services that meet the needs. The problem, however, is that in areas where there is a purchasing power deficit, local authorities are struggling with low budget deficits. So it closes. The essence of local development can therefore be - in the social economy - "taking matters into their own hands". A territorial unit is a place where the needs of each resident should be met. This should be managed properly. In order to meet such a task, specific rules should be met, such as the appropriate qualifications and competences of officials, attention to the positive image of TU, reliability, lack of tolerance for corruption

and nepotism. However, local self-government is not capable of satisfying the needs of its inhabitants without proper social commitment. Social involvement can in turn be understood as the citizen's own contribution to solving the problems of the community to which they belong (compare: Niewiadomski 2016, p. 67).

In the studies devoted to the management of territorial units (starting with the state and the municipality ending), the term "governance" is often used. The concept of "governance" has in its essence much more to do with management than to that of traditional administration. It can be defined as a self-organizing network functioning in the intergovernmental space - in the sense of state governments as well as local governments (Cichobłaziński 2016, p. 30). The decentralization of power in most European countries is the result of not only a kind of political fashion but also the need to improve the effectiveness of economic and social decisions. Local authority, like a private owner, performs better (more effectively) tasks than the central authority. Due to the knowledge of the specific nature of a given unit of local government. The consequence of a decentralization policy is to compete for regions or cities with limited resources on the market, with stakeholders - current and potential residents, tourists, investors and finally buyers of products from a given place on the map of the world. Local authorities are seeking not only to raise as much money as possible but also to create the best, recognizable brand of the product (Chrzan, Łazorko 2010, p. 224).

Among the masses of goods and services available on the market significant success opportunities are only those that arise in the minds of buyers. It is therefore necessary to build and maintain a positive image of a particular product brand in the minds of consumers, branding. The territorial unit is a different offer from the average market product, but in many marketing matters it uses similar techniques to other products. This also applies to branding. The term "city branding" means the ability to choose and strengthen the position of a city in relation to it, by creating a specific image that is both a source of economic and symbolic added value. Making a city is neither a necessity nor a fashion. It is a trend that, if it is well understood and skilfully used, can make a significant contribution to improving the city's situation, exploiting its potential, and accelerating its pace of development. Attractive image means that tourists visit the place, entrepreneurs have more confidence, so they are more willing to invest, and new (generally wealthy) residents settle in the promoted area (Chrzan 2011, p. 9-28).

Due to its role in the social economy of a given territorial unit, the inhabitants can be divided into the following groups:

- persons whose activity contributes to the implementation of social policy is not aimed at achieving their own benefits and is a kind of hobby, derives from "local patriotism";
- people whose activity is geared towards achieving individual benefits and contributing to their goals;
- persons / entities that carry out actions for the implementation of social policy due to their functions or carrying out statutory tasks.

The first group is made up of individuals and groups of people. Consciously, deliberately or spontaneously they undertake actions contributing to the execution of the respective tasks within the area of the given city (municipality, etc.) and beyond (eg in the web space). The second group consists mainly of entrepreneurs, organizers, co-operatives who undertake or organize activities of a commercial and social character (eg cooperatives of various types). The third group of inhabitants who play an important role in the implementation of social policy are politicians/civil servants working in local governments or political organizations, as well as politicians working in a broader forum but coming from a given city and for whom it is a political base. There are also professional associations or non-governmental organizations.

Different types of capital are needed - production, financial, environmental, intellectual, human and social. Such a process is strongly dependent on regional social bonds and networks of co-ordination, determined by reciprocity, interdependence, cooperation and power (self-government). It seems that intellectual capital managers should strive to obtain information that enables them to assess the impact of intellectual capital on the economic performance of the regions. Regional strategies, and in particular innovation strategies, set many goals for which the implementation of intellectual capital is required. At the same time, implementation of the strategy contributes to a greater or lesser extent to the development of specific elements of intellectual capital (see: Kozak, Pachura, Nowicka-Skowron 2013, p. 85; Hausner 2008a, p. 14).

Management of TU is most influenced by socio-economic changes, some megatrends that take place all over the world, but in Poland they have especially impressed on the behaviour of average citizens and managers of all levels representing different types of institutions. These socio-economic trends, which are relevant for this study, include: increased competition and competition between territorial units and increased social and economic awareness of society.

The proper management of a territorial unit, in general, should lead both to improving material living conditions as well as satisfaction from all spheres of life. The point is that in a given territorial unit, happy people, material and spiritual rich, will live and work. This key objective of TU management can be achieved in a variety of ways. For example, through marketing activities addressed to the residents as customers, to link their lives and activities with the place. And this can be achieved by providing them with appropriate development opportunities and the conditions for their individual successes to be the success and development of the entire local community. Social economy can in this case be realized by creating favourable circumstances for the creation of various types of cooperatives, especially social co-operatives. This goal can also be worked out through actions targeted at other stakeholder groups, such as entrepreneurs or other wealthy and influential people (academics, athletes, actors), to encourage them to engage with a place to make some material or intellectual enrichment. community. If the actions of local governments fail, if the needs and aspirations of individual stakeholder groups are not met, they will probably be associated with another, competing area. The actions of local authorities should also be directed to other external clients

arriving and leaving their money, such as tourists, participants of sporting events, cultural events, scientific symposia, various fairs and business meetings, spa services, etc. Another group of addressees of marketing activities of the authorities Territorial units should be the purchasers of products produced in a given location (compare: Chrzan 2011, p. 9-28).

Growth, stagnation or economic recession are manifested not only by the causes of global socio-economic phenomena, but also by the functioning and management of individual regions. In the age of globalization, therefore, local action is no longer important. Global dynamic processes, together with the global financial crisis, reinforce regional interest, particularly local. Local development is therefore dependent on the actions of both local and state-owned entities. However, local development depends primarily on how the local government, the district, the municipality and their resources manage. The constructive actions of the local authorities are developing the region, which, in turn, contributes to its attractiveness to the local community, but not only. The attractive region, the more developed municipality is more interesting also for tourists or external investors (Kabus, Nowakowska-Grunt 2016, p. 41). Regional development is an economic process, consisting in the transformation of the internal and external factors and resources of a given region into goods and services. Its main condition is economic growth and the goal of raising the standard of living of the community in various aspects. Growth means quantitative changes, and development - in addition to qualitative and structural changes (Brendzel-Skowera, Puto 2011, p. 127). Knowledge economy management forces other public administration representatives to take over. Public administration should make greater efforts to create economic network links in the area of local economy. The current tendency in public management is the growing relationship between the public and private sector and a significant increase in the state's participation in socio-economic life, and above all the need to meet many of today's challenges, such as economic efficiency and social justice (Odzimek 2015, p. 78).

Thus, like other economic operators, TU has to include marketing in its management. Just as we are dealing with banking marketing, tourism marketing and sports marketing, we are dealing with territorial marketing. Taking into account the social aspect to be considered, the marketing of territorial units will in a sense resemble internal marketing. According to A. Basdereff, "territorial marketing covers all strategic and technical approaches that organizations, , with the ethical principles leading to the fulfilment of a particular mission" (Szromnik 2006, p. 37). T. Markowski defines territorial marketing as a "market oriented concept of city, municipality or regional management by local government and its partners to meet current and future needs of internal and external users" (Markowski 2006, p. 108).

A territorial unit is usually a self-government unit, which means that the local authority operates under the authority of the local community, derives from it and operates on its behalf; there should therefore be no conflict of interest between the management of the area and its inhabitants. Addressing the expectations of a territorial unit as a whole cannot be contradictory to meeting the needs of

individual inhabitants or communities, even - or even especially - if they are representatives of power. Reality shows, however, that the representatives of local authority who implement their political program (career path) do not always implement the social policy objectives of their city (voivodships, municipalities, etc.).

Conclusions

When people realize that neither the state nor the big business will meet their needs, they must step up themselves. One of the pioneers of local economic development, Sam Aaronovitch of The Local Economy Policy Unit, put it this way: "There is no escape from self-help!" (Birkholzer 2006, p. 28).

The management of a territorial unit is closely related to social marketing, understood as the effective use of marketing tools in order to influence the attitudes of the final recipient in the interests of the good of the community. As part of its social marketing activities, Financial outlay for solving specific social problems. It has also recently been noted that the flow of these funds to certain non-profit institutions. Thanks to these activities, local communities have the assurance that help will reach the most needy, and that administrative costs will be lower.

The main goal of managing territorial units is to invest in such development factors that will accelerate this development as much as possible. It is also important to improve the situation on the labour market in order to reduce unemployment, especially among the people with disabilities. Such entrepreneurial approach contrasts with the earlier position on city and region management, which essentially consists solely in the provision of public services and the creation of public infrastructure. TU must also demonstrate the ability to adapt to changing environments and the ability to exploit opportunities so as to gain and retain factors that have a positive influence on its development and operation. Competitiveness can be seen in the category of obtaining sustainable advantage by entities operating in a given area and as a process of competition of public authorities for access to the indicated benefits (compare: Czarnańska 2012, p. 64-66).

The concept of a social market economy has emerged as a criticism of both capitalism and the centrally controlled economy. The cause of the emergence and dynamic development of social economy organizations, including the emergence of social entrepreneurship within them, should be seen not only in public services and the market sector of many social needs (growth of structural unemployment and new poverty), their inadequate recognition (traditional constraints social policies in the area of counteracting social exclusion of people with low qualifications, refugees, minorities, disabled people). Their activities are also the result of the development of needs, for which the social economy organizations such as associations, foundations, social and ordinary cooperatives, not the public or private sector, meet their best interests, because of their rooting in the local environment and often better knowledge of their needs (Leś 2008, p. 45). Managing the TU through its strategic dimension should unite local communities to meet their needs in key areas. It can be concluded that the actions of the

territorial authorities have succeeded if the stakeholder groups concerned are satisfied with the life and activities of the territorial unit and the expectations of newcomers or entrepreneurs are met.

To sum up, one can therefore point to three sets of objectives to be achieved by managing a territorial unit:

- 1) improvement of living conditions and economic activity for the stakeholders of a given territorial unit;
- 2) increasing the attractiveness and competitiveness of the area in competition to attract investors, tourists, elites, etc.;
- 3) shaping the positive image and competitiveness of the territorial unit as a producer of products on the global market.

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ZARZĄDZANIE JEDNOSTKAMI TERYTORIALNYMI W ASPEKCIE GOSPODARKI SPOŁECZNEJ I ZRÓWNOWAŻONEGO ROZWOJU

Streszczenie: Obecnie, w odpowiedzi na kryzys gospodarczy wynikający z nadmiernie liberalnej wolnorynkowej polityki i krytyki „państwa opiekuńczego”, zwracamy się w kierunku ekonomii społecznej. Z kolei najczęściej wskazywanym celem zrównoważonego rozwoju jest wzrost dobrostanu społecznego i indywidualnego oraz harmonijne ułożenie relacji między człowiekiem a naturą. Ekonomiczne aspekty rozwoju lokalnego powinny zawsze być powiązane z aspektami społecznymi, ponieważ istotna jest ich współzależność. Cel niniejszego artykułu stanowi wykazanie, na podstawie badań literaturowych, jak ważne jest uwzględnienie w zarządzaniu jednostkami terytorialnymi idei ekonomii społecznej i zrównoważonego rozwoju.

Słowa kluczowe: zarządzanie jednostkami terytorialnymi, ekonomia społeczna, zrównoważony rozwój