

CHALLENGES OF MANAGEMENT IN MODERN ORGANIZATIONS

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INTRODUCTION

The success of modern organizations' functioning, independently from their legal, ownership and organizational form is conditioned by many factors. These factors are connected mostly with numerous changes that are observed in the external and internal environment of the organization. These changes refer to social, economic and technological layer of the organization. In a social zone important changes are noted, which, first of all, concern the labor market. Successive generations of employees which represent different look at the organization as well as at the work itself and presenting a different structure of competences, they force employers to change their approach to managing the human factor in organizations. Economic transformations which are mostly consequences of the XXI century's crisis, shaped new schemes for the functioning of the organization, both private and public, based on the assessment of the risk of undertaken projects. Sensitivity to risk issues does not only affect the financial sphere, but is reflected in activities related to broadly understood security.

Processes of organizing and leading the production, exchange and flows of capital in a world scale and the treating the whole of the globe by economic operators as one market is an expression of a progressive globalization still in the foreground with regard to the economic aspects of the organization's functioning. The global flow of ideas and concepts concern not only new methods of management but primarily, the technique and technology. The changes in this last ground are so fast and wide that simulations of organizational's reality about the future seem to be unreal and futuristic. The organization's actions in these turbulent conditions force on managers seeking new and diverse ways of forecasting and reacting. Goals and priorities of functioning in modern organizations undergo the transformation. In addition to the profit category, there are goals that take into account the ideas of sustainable development (on the micro, meso and macro scale) and socially responsible business.

A presented monograph consists of five chapters where the studies related to the above-mentioned issues are placed. In the first chapter the topic of ecosystem of modern organizations' operation was raised. A term of ecosystem is understood in much more wider aspect than just ecological surrounding of an organization. It refers to aspects like: regional, national or European policy, education and knowledge exchange, building social and economic networks between organizations and society. In the second chapter of the monograph the authors' reflections on the implementation of the concept of sustainable development in management were collected. Third chapter presents the subject area of challenges that modern organizations must face in relation to the changes taking place on the labor market. A successive chapter is about the selected problems of managing public organizations. In the last chapter of the monograph studies in the field of production management were presented which primarily consult the issues of technological changes and the resulting changes in the area of management methods.

The presented monograph is a collection of selected compilations which main thesis were conferred during the 8th International Conference of Management: Leader-

ship, Innovativeness and Entrepreneurship in Sustainable Economies (ICOM 2018), which took place in Faculty of Management, Czestochowa University of Technology, 7-8th June 2018. This conference as well as materials published within its framework were co-financed by the Ministry of Science of High Education in the frame of the found for Activity Disseminating Science No 805-/P/-DUN/2018.

The editors of the monograph are convinced that this set of studies will contribute to the broadening of knowledge concerning selected aspects of the modern organizations' functioning and it will be the inspiration for further research in the discussed areas.

I. FACTORS INFLUENCING ECOSYSTEMS OF ORGANIZATIONAL PERFORMANCE

HOW DOES PERFORMANCE INFLUENCE BUSINESS PROCESS MATURITY – EVIDENCE FROM LITERATURE

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Abstract: Although many studies on the influence of general concepts of maturity on performance are available, the empirical focus on business process maturity in particular, remains scarce. This paper addresses the identified research gap through providing the results of a systematic literature review. The analysis focuses on papers covering BPM (Business Process Management) and BPO (Business Process Orientation) maturity models and their impact on financial and non-financial results of the organisations. The introduction of the paper provides theoretical foundation to the concept of business process maturity and its relations with performance. This part is followed by the research methodology and systematic literature review results. In its final part, the paper focuses on conclusions, further research directions and limitations.

Key words: business process maturity, business process management, business process orientation, performance, relationship, systematic literature review.

Introduction

Process maturity is defined as “the degree of explicit definition, management, measurement, control and effectiveness a process has” (Humphrey 1987, pp. 1-13). Worldwide research conducted among different types of companies (Wolf, Harmon 2014, p. 5; Wolf, Harmon 2016, p. 7) prove that organisations are increasingly becoming process-oriented and the maturity of their processes and organisation as a whole is systematically improving and treated as a source of competitive advantage.

Process maturity models have emerged as a measure to evaluate the capabilities of an organization in a certain discipline, and in a number of studies maturity is defined as the ability to systematically provide better business results, and thus is linked to process and/or organisational performance (Rosemann, De Bruin 2005, p. 2; Hammer 2007, pp. 111-123).

Different authors indicate that a higher process maturity leads to better organisational performance, which is observed through better control of results, improved forecasting of goals, greater effectiveness in reaching defined targets and an improvement in managers’ abilities to propose new and higher targets for performance (Lockamy, McCormack 2004, pp. 272-278; McCormack 2007, p. 52; Poirier, Quinn 2004, pp. 24-31).

The relationship between maturity and performance has been widely studied (Dooley, Subra, Anderson 2001, pp. 23-29; Lockamy, McCormack 2004, pp. 272-278; Batenburg, Versendaal 2008, pp. 563-574; Reiner, Hofmann 2006, pp. 5065-5087; McCormack et al. 2009, pp. 792-815); however, the nature of the relationship between

process maturity and performance has yet to be fully explored (Tarhan, Turetken, Reijers 2015, pp. 1-16). This paper therefore aims to present the results of a systematic literature review on the relationship between business process maturity and performance, and so address the identified research gap.

The methodology of the systematic literature review

The literature study covered the contents of the leading databases containing scientific publications, including conference articles. In particular the following sources were analysed (in alphabetical order): Emerald, ScienceDirect, Scopus, SpringerLink, Web of Science and Wiley. In order to improve the research process, the EBSCO Discovery Service tool was used, which enables searches within the above-mentioned databases with a common interface. The analysed period covered the years 2002-2017. The database fields for which the search queries were applied included the title and keywords, and also wherever possible (the database allowed this type of search) the abstract.

The following search terms were used:

- ("process maturity" OR "process capability" OR "process orientation maturity" OR "process orientation capability" OR "BPM maturity" OR "BPM capability" OR "BPO maturity" OR "BPO capability ") AND (" performance "OR" performance measurement ") AND (" research "OR" results "OR" survey ");
- ("process" AND "maturity" OR "capability") AND ("performance" OR "performance measurement") AND ("research" OR "results" OR "survey").

In total, 63 papers were identified and an in-depth analysis was introduced afterwards. It focused only on papers where original empirical research results were presented and only those that analysed the BPM (Business Process Management) and BPO (Business Process Orientation) maturity¹ in relation to performance. Papers focusing on other types of maturity or focusing on the maturity of single processes were excluded from the study. As a result, the final research sample consisted of nine English language articles by foreign authors and one Polish language publication by Polish authors. The analysed publication covered the following 10 items numbered in the literature section, as follows: 3, 5, 6, 11, 18, 19, 20, 24, 25, 27.

For the main part of the study, an analysis of the identified publication was conducted in order to determine the characteristics present in all the papers that were used for a qualitative description of the described research. Those characteristics included the following aspects:

1. The characteristic of publication and research: the purpose, research methods used and characteristics of the research sample.
2. The model, constructs, variables and method of measuring process maturity and performance: the process maturity model used in the study, the method of process

¹ For an explanation of the nature of the BPM vs BPO maturity, please refer to e.g.: Van Looy, De Backer, Poels 2010, pp. 7-16; Van Looy, Backer, Poels 2014, pp. 188-224; Houy, Fettke, Loos 2010, pp. 619-661; Röglinger, Pöppelbuß, Becker 2012, pp. 328-346.

maturity assessment, the performance measurement model used in the study, the method of performance evaluation.

3. Results/conclusions: the nature of the relationship between process maturity and performance, type of dependence, and analytical methods used to determine the dependence.
4. Limitations: defined by the author/authors directly in the publication, defined upon the analysis of the content of the publication or performed research.

The results of the systematic literature review

On the basis of a systematic review of literature, the following conclusions can be formulated in relation to the analysed publications.

1. All the authors of the publications aimed to determine the relationship between process maturity and achieved organisational or processes results. While process maturity usually referred to a specific model, the performance varied significantly in terms of the scope covered and detailed characteristics measured (e.g. quantitative: financial and non-financial metrics, sets of measures or a single measure; qualitative: success of the processes or benefits of achieving process maturity).
2. All the research was based on quantitative methods (surveys).
3. The dominant research samples reached within the surveys covered over 201 units (three publications) or between 101 and 200 (five publications). Smaller research samples (below 101 units) could be observed in the case of two publications. The authors most often (eight cases) used non-random sampling (intentional, consecutive, convenient, etc.); however, in case of two publications, the selection was described as random.
4. The models used for determining the level of process maturity of a surveyed organisation included the author's own model (three publications), the McCormack Maturity Model (three publications; McCormack 2007, pp. 61-73), BPMM-OMG (three publications; OMG 2009, p. 8), CMMI (one publication, SEI 2010, pp. 1-21).
5. In the cases of seven publications, constructs (statistically analysable) covering various aspects of process maturity were used, while in three publications the assessment of process maturity was based on a subjective assessment based solely on the scale adapted from a maturity model.
6. The authors of the publications used different models for performance measurement: in six cases, non-financial and financial indicators were used (of which only two publications referred to financial ratios calculated on the basis of real figures and were not based on opinions); in three cases authors used only non-financial measures, and in one case a single financial indicator was used as a performance measurement tool.
7. The performance evaluation was based largely on constructs containing variables (six publications) or a set of variables not grouped into research constructs (four publications): (a) constructs describing non-financial results included

relationships with suppliers, employee results, customer results, internal results, logical results, etc.; (b) constructs describing process implementation parameters included efficiency, traceability, effectiveness, response time, customer focus, continuous improvement, quality, measurability, employee satisfaction, competitive advantage, flexibility; (c) in the case of publications that included financial results, the following items were taken into account: ROA, value added per employee, profit per employee and process costs.

8. Respondents' opinions were the dominant method for assessing the results, both in the case of financial and non-financial results (seven publications). On the other hand, in the case of three publications, the assessment of financial results was based on actual values.
9. In all the publications, the relationship between process maturity and results was confirmed in whole or in part: (a) if the financial results were measured through opinions, the relationship between the maturity and results was confirmed in each case, with the same applying to non-financial results – the dependence was positive in all cases; (b) in two out of three of the publications in which the assessment of financial results was based on actual values, the relationship between process maturity and financial results was not confirmed and the dependence was confirmed only in one case (Radosavljevic 2014, pp. 599-614); (c) in three cases the results were inconclusive (some relationships were considered significant and some non-significant): Tang, Pee, Iijima 2013, pp. 650-660; Dijkman, Lammers, de Jong 2016, pp. 717-734 and Gębczyńska, Jagodziński 2017, pp. 147-157.
- 10.1 The analytical methods used in the papers covered SEM – structural equation modelling (five cases), ANOVA (two cases), linear regression (two cases) and a chi-square test (one case).
11. Limitations of the conducted research were formulated by their authors in eight cases out of ten. The indicated restrictions focused on: (a) the lack of a time lag between the assessment of process maturity and the assessment of financial results; (b) relying on the opinions of individual informants, while it could be more appropriate to investigate process maturity on the basis of the opinions of several key staff involved in process management in the studied companies; (c) the lack of representativeness of the research sample and the low return rates of the conducted studies.
12. The second group of restrictions (formulated on the basis of a detailed analysis of the content of the publication) mainly covered issues related to the limited scope of the performance measurement characteristics, without proper recognition of other financial and non-financial indicators.

Conclusions, future research directions and limitations

After a detailed analysis of the results of a systematic review of the literature, it is possible to formulate general conclusions regarding the research on the relationship between process maturity and performance. Process maturity usually referred to

a specific model and thus the approach could be described as generic, whereas in the case of performance, the authors used very different approaches, however, none of them could be described as comprehensive. The results were considered from different points of view, such as:

- a set of financial and/or non-financial indicators,
- a single financial indicator,
- an evaluation of the success of the implemented processes,
- the benefits of achieving process maturity,
- the effects of innovative activities.

On this basis, it can be concluded that there is a large discrepancy in the approach to defining performance in general and specifically determining results in process maturity related studies. This conclusion can be justified by the works of other authors on the multidimensionality of the performance concept (Chenhall, Langfield-Smith 2007 pp. 266-282). At the same time it can be suggested that at the research level, different performance dimensions should be taken into account and a comprehensive approach and research tool should be used to investigate the existing relationships.

Furthermore it must be stated that although most of the research methodologies of the analysed studies were based on respondents' opinions as performance measures, such an approach has obvious limitations, such as representing the performance of the company from a limited point of view (due to cases of single informants involved in the study). In this situation, an approach where metrics based on respondents' opinions (subjective, both financial and non-financial) are supported with financial indicators (objective, calculated on the basis of real figures) could be indicated as the most appropriate, as it would incorporate a two-pronged approach of a subjective and objective performance evaluation.

Finally, the main limitation of the analysed studies was the lack of a time lag between the process maturity and performance evaluation, which consequently meant the possibility to observe the effects of rising process maturity on results was limited (if both studies were conducted in the same period, as in the examined cases). A solution that could be implemented in this situation is either to conduct panel type of research or use secondary financial data sources. The first solution would allow the changes in process maturity and organisational results to be observed over periods of time. Such cases, however, are extremely rare and almost non-existent in management studies (due to the difficulties in conducting this type of research). The second proposal would necessitate retrieving real financial data for surveyed companies from databases such as Thomson-Reuters Data Stream/Eikon or Emerging Markets Information Service (EMIS), which could be further analysed. Two conditions should, however, be met in order to implement such a research procedure effectively: (a) the qualitative survey cannot be anonymous in order to identify entities that would further be looked up in financial databases and (b) the researcher has to accept the longer duration of the survey – such a study might take a few years – because the financial datasets for a current year are not published until the following one, and in many cases a single measurement point is not sufficient for a statistical analysis to be conducted (Urbanowska-Sojkin 2013, p. 432).

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THE DEVELOPMENT OF THE EU BUSINESS IDENTITY IN THE CONTEXT OF EUROPEAN INTEGRATION

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Abstract: The sense of identity is very important in the modern world. It instills the sense of belonging to a group, as well as makes actions meaningful. It is associated with many factors such as the existence of common goals and activities, as well as with similarity of values.

The creation of the EU business identity is, in the face of a strong economic competition in the world, very important. This issue can decide about the success of the entire EU community on the international markets. Unfortunately, not all European entrepreneurs are aware of this. A part of them seems to manifest a kind of `business separatism`.

At the same time, the EU has the ability to change this state of affairs for the better.

The fact that European economic life has a rich business heritage with numerous instances of a good collaboration which took place in the past across whole Europe can be important in this context.

It is important as well that European companies share a feeling of common threats, which is largely connected with the globalization. Also, the cultural aspects can play a significant role in the business identity creation process in the EU.

The purpose of this paper is to draw attention to the issue of the EU business identity along with the difficulties connected with it.

Key words: business, cooperation, culture, EU, globalization, identity, values

Introduction

The problem of the sense of identity is relatively rarely discussed in the context of economic activity. Economic activity is not just about profit-oriented actions. Undoubtedly, efforts to achieve profits play a very important role in this regard, but it is not only them that count. Economy is, first and foremost, an integral part of social life, and as such decides, along with satisfying the needs, also about the course of interpersonal relations in human communities. The situation with the sense of identity becomes more complicated when a `double sense of belonging`, for instance, business and national one, comes into play. An even more problematic situation arises when a multiple identity, as this in the case of the European Union, is at stake. This requires searching for new solutions when coping with numerous challenges of contemporaneity (Beck 2016, pp. 140-186).

It is not difficult to state, upon the basis of the available data, that, at present, the European business identity was not achieved. Despite this, there is a significant approximation of economic structures from various countries belonging the European Union within this organization. The EU is referring to the concept of a social importance of the economy as evidenced by various programs of an economic and social nature.

The sense of community is not something simple. It is even more complicated when it is connected the economy, and is frequently associated with the `fight for profit` (Dahrendorf, n.d., pp. 241-279).

European integration which began after World War II is a fascinating process marked with successes, as well as problem-ridden. At the beginning of it, there was safety and economic collaboration, and a peaceful coexistence of former enemies. These two issues were closely related. Economic development had also a lot to do with security; the understanding of this fact intensified the integration processes and their perceived success.

Therefore, connecting the integration process with economic issues was an important point, initiating the possibility of acting in the area particularly important for the founding countries of European integration movement. However, paradoxically, despite the fact that European integration began with economic agreements and practical collaboration in this field, the European Union did not manage to create its own `business identity`. The process of creating such an identity will be a serious challenge to the EU in the future. Achieving this goal requires a lot of effort, and its result is not certain. The purpose of this paper is to draw attention to the issue of the EU business identity along with the difficulties connected with it.

Methodology

Gathering and interpreting data was difficult due to the multidisciplinary nature of the issue. It required, apart from `standard techniques` like documentary research method and the analysis of media content, also the use of the comparative historical research method according to Max Weber (Weber 2009, pp. 81-167). The last one contained the comparisons of social, political and economic processes taking place over time with a particular emphasis upon the changes taking place in European business organizational structures.

While examining the subject of the EU business identity, it will be important to refer to the literature dealing with the various aspects of European integration. Among the books in this field, the following should be noted: D. Johnson, C. Turner, `European Business`, I.T. Berend `A History of European Integration` and M. Gilbert `European Integration. A Concise History`.

Historical roots

The great military and business activities of European corporations since the 15th century onwards have been a relatively new phenomenon (Cipolla 1972, pp. 339-373). At that time, Europeans gained a technical advantage over the rest of the world, and used it. As a result, the colonies were possessed by many European countries. At the same time, the economic activity, both of governments and of individual entrepreneurs, also played a major role. During the Technical Revolution, developed European countries dominated the world stage (Janik 2017, pp. 16-20). By using

military force, they built powerful empires and exploited conquered lands. Private entrepreneurs helped build various economic initiatives helpful for governments, and frequently joined each other forming strong capital groups. This way, establishing `the first modern corporations` occurred; a good instance of this could be the Dutch East India Company, which had been very active in the Indian subcontinent, before it was forced to leave it by the East India Company. The activities of this latest organization were not limited only to the economic field, but also pursued political activities, as well as the military ones. The East India Company made history as an unscrupulous organization, which managed to subordinate the Indian Peninsula, and, *per fas et nefas*, became the real ruler of this huge territory. This situation changed only after the Sepoy Mutiny of 1857, which the regular British Crown troops had to suppress. At that time, India came under the direct control of the government in London (Fischer 1957, pp. 1038-1075).

Back then, Europe became the scene of the development of modern economic and managerial institutions. The great achievement of the Old Continent was also the development of a system of laws that would regulate economic activity both in individual countries, as well as internationally (Cipolla 1974, pp. 427-594). Simultaneously, all economic doctrines, like the mercantilism, physiocracy, liberalism, communism, neoliberalism or interventionism, were born in Europe (Cipolla 1976, p. 703; Janik 2017, pp. 25-35).

Due to the fact that the main European countries had colonies, the solutions applied in the metropolitan countries were also used in them (Eckert 2006, pp. 2-94). This gave international entrepreneurship an international character. Despite these, undoubtedly great, achievements, Europe failed to create a continental unity, or to maintain an initially-privileged position in the global economy. The reason for this was selfish competition. Simultaneously, in Europe, an organizational framework of the economic system (among others, banks and exchange stocks), in which enterprises operated, developed.

Integration process

The general climate for peaceful collaboration among individual European countries was not good after the Second World War (Dahrendorf 2000, pp. 33-53). However, it became possible to overcome the impasse after the Schuman Declaration, delivered by the foreign minister of France, on May, 9th, 1950, in which he proposed the Federal Republic of Germany to put the management of coal and steel production under the common control of the High Authority. Some of the aspects of the proposal were related both to security and economics. The acceptance of this proposal by the newly-created Federal Republic of Germany initiated the integration process, and the creation of the European Coal and Steel Community was the `first step` in this direction. According to Schuman's initiative, six countries: the newly formed Federal Republic of Germany, France, Italy, the Netherlands, Belgium and Luxembourg decided to collaborate with each other in the area of economy (Marshall, 2016, pp. 92-113).

It is worth remembering that, at the beginning of the existence of this organization, its members were the former enemies from the times of the Second World War. It was connected with numerous prejudices which hindered mutual economic collaboration within this community (Janik 2017, pp. 87-88). Over time, the situation began to change for the better. The reason for this was the growing sense of the existence of common interests, fuelled additionally by the good post-war downturn. Also, the 'capital injection' related to the Marshall Plan had a positive impact on the climate of economic activities. New business opportunities appeared in connection with the Cold War and the Korean conflict (1950-1953). It was possible to feel the 'breeze' of positive emotions, and to look for what 'unites', rather than for what 'divides'. (Gottstein 1992, pp. 155-164) The Treaty of Rome, signed in 1957, responded to the problems of the European Community. As a result, two new organizations: the European Economic Community and the European Atomic Energy Community (Euroatom) were established (Servan-Schreiber 1967, pp. 115-305).

The creation of the Euroatom provided new impulses for the development of entrepreneurship within this organization. The activities undertaken at that time allowed to strengthen a scientific potential of the laborforce, and raise the level of technical development. During this period, interest in alternative forms of obtaining electricity started to grow. It was frequently associated with a pacifist movement that saw the threat to human security in atomic energy. The 'green movement' emerged from the combination of these two interest groups, which plays an important role in many European countries nowadays. The search for alternatives to carbon and atom's splitting had its impact in the field of economics.

At first modestly, and then, gradually, on a larger scale, the foundations of the so-called 'green economy', which was successful in a number of EU countries, e.g. in Denmark, were laid (Gehler 2002, pp. 41-95).

Simultaneously with the European Atomic Energy Community, another above-mentioned organization came into existence; it was the European Economic Community (EEC). Its creation meant the acceleration of the integration process in the economic area, especially in trade. The following years brought the further strengthening of the unification process in Europe.

The further progress of the integration process meant new possibilities of action, which deserve a particular attention in this context. The Merger Treaty was signed in 1965, and it combined 3 organizations (ECSC, Euratom and EEC) into a uniform structure. In 1993, the common market was established and 4 'freedoms' were enacted of the movement of goods, services, people and money were enacted; this was a fact of a fundamental importance.' The historian Alan Milward sustained that the construction of the EEC was "an integral part of the reassertion of the nation-state as an organizational concept." Nation-states throughout Western Europe needed to prove that they could deliver the goods to their citizens – not least because they feared that the less of twentieth-century European century was that without high levels of welfare, democracy would not survive. Europeanization, to use an anachronism, was a by-product of the urge to produce welfare. A customs union was agreed, against all odds, because The Six's economic growth was being dragged along by rapid West

German economic growth. The other five were anxious both to continue to profit from the German boom and to bind Germany into the Western camp. The EEC treaty was a means of satisfying this dual objective.' (Gilbert 2012, p.57).

After many years of preparations, euro banknotes and coins were put into use on January 1, 2002 (Berend 2016, pp. 170-173). This event is very important, especially, because the euro gained the status of the one of the most important currencies in the world.

The integration process was crowned with the creation of the European Union with the authorities, the parliament, uniform legal system and a number of institutions regulating the order in this organization. As a result, the fragmented and relatively weak forces of individual European countries were replaced by a powerful institution, which everyone in the world must take seriously.

This is particularly important in the situation of the emergence of new, powerful centers of economic life, which threaten the current status quo in this area. The economic sector, provided with powerful protection on the part of the EU, not only tries to retain influence, but also to succeed in areas where the Old Continent was not very powerful yet, for instance, in the computer sector. Collaboration under the umbrella of the EU institutions is an important step towards creating the business identity of the EU.

It is difficult to forget in this context large sums of money that were transferred under the cohesion policy. They mark not only the possibility of getting out of the civilizational collapse of many EU members which are underdeveloped, but also a significant step towards 'eliminating differences' in various areas of life, which should result in the socio-economic sphere, independently of the creation of a strong European market, in 'civilization community' and in the socio-economic sphere (Trafiałek 2003, pp. 207-248).

In addition to the European citizenship, it is also social awareness that plays an important role in the shaping of the European business identity. It allows to develop a better system of communication between employers and employees.

The development of the 'European business'

Analyzing the 'European business' phenomenon more accurately, it can be stated that European business circles did not lose creativity. Enterprises in the European Union countries tap into a large part of the 'national economic traditions' of their countries. Through collaboration with other companies operating on the territory of the EU and taking advantage of a number of benefits resulting from its existence, they acquire a 'European character'.

An important element of collaboration is forming the feeling of affiliation of European companies towards the Western cultural circle. At the same time, it can be noticed in the framework of the enterprises that there is a lot of openness and acceptance of 'elements of foreign cultures', thanks to which the economic activity is usually deprived of narrowly-understood nationalism (Zieliński 2014, pp. 393-412). This creates an opportunity for European economic organizations to avoid 'negative

values` and attitudes against `others` (Murray 2017, pp. 23-36), but rather to build upon what they have in common and what can be useful in relations with economic circles in other parts of the world. `Why European business? What is different about or business in Europa from American business or Asians business or business in any other part of the world? Clearly, business have much in common whatever their origin. They are all trying to find the best way to compete in a world which is becoming increasingly open and competitive. However, although their overall objective may be similar, business strategies are shaped and influenced by the culture, traditions, economies, political and institutional frameworks and general context of their home based. These contexts vary tremendously from country to country and from region to region.` (Johnson, Turner 2016, p. 1).

The European Union is a great market, and is one of the world's major powers. Despite numerous challenges, this organization offers an attractive civilizational combination of economic efficiency with a high standard of living, civil liberties and democracy.

In comparison with other parts of the world, the economic life in the EU is less violent and predatory. This applies to both employees and employers. Solid protection of employees' rights, as well as social protection systems, encourage the pursuit of economic activity in a sustainable and long-term manner, without the need to search for `profit at any price`. Well-developed legal systems, which aim to create a uniform law in the EU, is a significant achievement of the Old Continent. In this context, the behaviour of managers who, as a rule, try to avoid open conflicts with competitors using such an instrument as `price wars` or `hostile takeovers`, is important. It is possible to talk about a specific `European business culture`. This does not mean that there are no negative forms of behavior in the EU.

To a large extent, this can be seen by observing the `business elite` of Europe. `Openness` and `cultural diversity acceptance` prevail among them. This is especially important because of the fact that economic elites play a significant role in promoting the EU business. Having well-known names and high level of `public recognition`, they can shape social attitudes in the right direction. This also manifests itself in relation to foreigners; one can see within the EU a lot of commitment of business circles to integrating foreigners, both from within the organization and from outside as well. The activity of companies from the EU countries, like Volkswagen AG, Daimler AG, Groupe Yves Rocher, IKEA, Groupe PSA or the Würth Group, and many others, testify to the resilience of European business and to its originality as well.

Over the years of the integration process, the European business circles gathered a lot of experience in the field of human relationships. Such personal ties form a valuable social capital. Economic life is a sphere of intense interpersonal relationships that if organized appropriately, can become a source of many positive experiences.

It is important to remember those achievements of the integration process which enable companies to carry out effective activities in Europe. An important role in this context was played by a very good broadly developed infrastructure, extending from

transportation routes, through banking systems, various types of offices and including a dense network of research institutions. The `infrastructure`, thus understood, was largely unified during the integration process. (Johnson, Turner 2016, pp. 23-39)

The European Union also achieved a lot in the field of environmental protection, respect for human rights and educational standards. A significant part of the possibilities of creating business identity in the EU is associated with the sphere of political life. An appropriate policy can animate different projects and set the pace of their implementation. (Gilbert 2012, pp. 157-188)

The capital groups of various European countries and lobby groups have a significant role here. Despite the undoubted imperfections of this state of affairs, the existence of coordination possibilities is important. An instance of a successful political and business initiative is `Airbus`, which was initiated by the main leaders of the European Communities as a consortium which was to compete with American companies.

Attention should be paid to the role of symbolism in the search for a European identity. Before Airbus, the British-French supersonic passenger airplane with a turbojet drive – Concorde – gained recognition among airline customers despite some technical shortcomings.

Europe experienced a serious economic crisis that seriously undermined the sense of solidarity within the EU. Nevertheless, it managed to maintain unity, which allows us to cherish the hope of the possibility of further progress.

What can be done in order to improve the situation?

Of course, not everything functions well in the EU. In the economic life of our continent, there is a lot of hypocrisy; for instance, there are companies that use `nice slogans` about the need to cultivate `European value` and respect workers' rights, but, in practice, they do not carry anything of what they pledge in their announcements. A similar situation can be seen in this regard in the case of environmental protection and the infamous `greenwashing`.

The economies of particular countries participating in European integration process have a great potential and develop in attractive directions; the problem is, however, that these directions are frequently different, which makes unification difficult. There is a lack of animation of economic life in the EU under the auspices of this `European business community`. The situation prevailing now resembles the `free struggle` of interest groups that do not care about the fate of their competitors while they are pursuing their own interests, and the phrases about `unity` and `solidarity` prevail only during various celebrations, without attaching any importance to them in daily life.

The European Union has well-developed business organizations, but they lack coordination to a large extent. The analysis of the problem of the EU business identity allows to propose the following steps in order to accelerate it:

- improve the technical possibilities of business collaboration in the EU,
- improve the intellectual possibilities of collaboration / the potential of European staff,

- connect the operation of scientific centers to the needs of business practice in the EU,
- set up think tanks, like the `Club of Rome`,
- build `business collaboration groups`,
- remove greenwashing practices and similar activities that hinder collaboration,
- support the creation of companies associated with the `European spirit`,
- the increased intensity of considering environmental issues in the field of economic activity,
- improve the intensity of the social inclusion,
- collect experience with various types of property and play the role of `animators` in the world – e.g. cooperatives,
- intensive development of science and education,
- create business information base,
- make specialization – for instance, in the field of ecology, clean energy or medical sector,
- the development of the opportunities of collaboration with other companies – the stronger they are all, the stronger the business identification of the European Union,
- encouraging business organization to engage in the implementation of European programs.

It is extremely important for the development of the EU's sense of business identity to maintain a high level of consciousness of the citizens. It allows one to control business operations, and to prevent its degeneracy. One can prevent this way negative phenomena that are affecting the economy, including various attempts to commit `abuses`, such as `greenwashing`. A big field for controlling is the foreign activity of European corporations whose activities were criticized in the media in the past, among other things, for not respecting the principles of environmental protection or for doing business with dictators. This would have a positive influence upon the business identity in Europe.

Conclusion

The European Union is much more than just an economic community. Nevertheless, from the very beginning, this organization showed great commitment in the economic field. This is not surprising given a huge amount of tasks and challenges that this organization has to deal with. The European Union donated huge sums to the cohesion policy, thanks to which the standard of living in different member states of this organization became more similar. The European Union managed to, to a large extent, connect economic issues with a social policy typical for welfare state. It opens the possibility of effectively combating poverty and social marginalization. The business sphere was also involved in pro-social activities, and, although the situation in this area is not yet optimal, significant successes were achieved here.

At the same time, the EU business achieved, for the first time in history, the possibility of acting and developing on a unified organizational area, with established uniform law, common currency, good financial services and developed road infrastructure, not to mention many other conveniences. This provides favourable conditions for shaping the sense of identity of business circles of the European Union. It is also favoured by the joint activities undertaken by entrepreneurs from the EU, which are frequently supported by the authorities of this organization.

Despite an overall positive balance of the EU achievements, not all of the plans were successfully implemented by this organization; the failed creation of the European Armed Forces could be an instance. Also, in the area of business, not all seems to be perfect as it is evidenced by various scandals that from time to time reach the public.

Notwithstanding this, the European Union is a significant force in the global economy, which is especially important at the time of globalization when new commercial powers are being created, and the EU must constantly fight to maintain its own privileged position in the global trade. Shrinking of the outdated model of national economies during the global competition of powerful economic entities must lead to a catastrophe. In this context, efforts to create a sense of belonging to this organization among the EU businessmen can only be helpful.

The analysis of the results of the conducted research made it possible state that the possibilities of development of the European business community are significant. In principle, considering the situation in the world, this option seems to be the most logical one. It is only that that can provide the inhabitants of the Old Continent with sufficient 'internal cohesion'. At the same time, it should be noted that such a business community is something much more than just a 'brand', as it is a sense of the same values, goals and codes of conduct. Economic life is not only 'goods and numbers', but it is based, above all, upon the reciprocity of social interactions. Economic activities are largely social in their nature. Because of this, the process of European business identity creating has a great impact on the European management of different levels. In practice of work, managers are confronted with 'diversity', and should learn to accept it, as well as to treat it as a valuable source of inspiration.

Awareness of common possibilities motivates not only to be 'side by side' together, but also to collaborate closely with one another, as well as strengthens the conviction that standing together as one makes the EU a real force that counts in the world.

The collaboration within the EU plays an important role in the process of globalization, which also made a significant level of mutual collaboration necessary. The sense of unity in the EU in the economic aspect may have an impact on the current uncertainty in international relations, connected with the unstable attitude of US President Donald Trump towards former trade agreements and the existence of the EU as such. Also, the decisions of the D. Trump administration to increase tariffs on steel made many EU enterprises aware of the importance of the unity to defend their interests. Maybe, it would be also time to follow the old concept of the 'justice economy' (for instance, 'fair trade'), as it would be compatible with the EU values.

It should be remembered that the main European economy thinkers, like A. Smith, D. Ricardo or J.M. Keynes, albeit in a different way, emphasized the necessity of maintaining proportions and avoiding injustice in the world's trade. This would add additional humanistic values to the 'EU business identity'.

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A CONCEPTUAL FRAMEWORK FOR INTRA-CLUSTER BENCHMARKING PARTNERSHIP

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Abstract: The concept of benchmarking partnership of cluster enterprises (intra-cluster benchmarking) is an important and interesting field of scientific research, in particular in the context of the paradigms of relation and cooperation of enterprises in network organisations, currently proposed in the management sciences. The purpose of this chapter is to present the essence and characteristics of benchmarking partnership of cluster enterprises and to identify the key factors facilitating the establishment of this form of partnership. The thesis is the claim that intra-cluster benchmarking is a form of partnership cooperation justified for the use by cluster companies, because of its features that promote mutually beneficial exchange of information concerning the results achieved and the best practices they use in different areas of their activity. The research procedure has been based on indirect research focused on analysing literature sources and deductive reasoning. Based on theoretical considerations and observations on business practices, the following research conclusion has been formulated: the essence of benchmarking partnership of enterprises within a cluster is a mutually beneficial exchange of information between enterprises participating in a cluster, concerning their performance and best practices in various fields of activity, according to partnership rules, that leads to improvement of performance of the parties involved in the benchmarking process.

Key words: benchmarking partnership, best practices, cluster, exchange of information.

Introduction

On the basis of the observation of the economic practice as well as the analysis theoretical considerations and the results of research on the cross-organisational relations included in the subject literature (see: Hamel, Doz, Prahalad 1989, pp. 133-139; Moore, Curry 1996, pp. 142-144; Czakon, Fernandez, Minà 2014, pp. 1-10; Czakon, Rogalski 2014, pp. 28-46), it may be concluded that currently, the combat with competitors is a thing of the past. The enterprises evolve along with the changing environment, redefine the relations and enter new forms of relationships with other business entities. One of the examples of an effective form of implementation of cross-organisational partnership strategies and integration of enterprises through cooperation, is a cluster.

According to the classic definition, clusters are "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate" (Porter 1998). Clusters can be also characterized as "relatively dense networks of enterprises and organizations, the value chains of which are connected but not necessarily through

what we usually understand by economic transactions” (van Dijk, Sverissson 2003, p. 185). All economic actors who directly contribute to the dominant production process of a region are partners in this network (Cooke 2003, p. 3). Clusters are made up not only of physical flows of inputs and outputs, but also include the intense exchange of business information, know-how, and technological expertise, both in traded and untraded forms (Sölvell 2008, p. 12). Thus, cluster participants may establish long-term partnership cooperation in fulfilment of common projects and cluster initiatives resulting in the competitiveness of involved partners.

Benchmarking is the response to the needs of contemporary cluster enterprises, that do not intend to rely solely on their own concepts, solutions and experiences, but are also focused on learning and using the achievements of partners within the cluster. Benchmarking refers to gathering information by the companies what others are doing, usually to evaluate whether they are operating efficiently or identify areas for improvement (Sharma, Iqbal, Victoriano 2013, p. 352). Generally, the term "benchmarking partnerships" means "mutual beneficial exchange of best business practice information which should lead to improved performance for all the organisations involved" (Bendell, Boulter, Goodstadt 1998, pp. 124-125). Establishing intra-cluster benchmarking partnership is a positive factor that improves competitive advantage of that type of cross-organisational networks, which in turn fosters innovation and economic competitiveness.

The review of the literature leads to a conclusion that the benchmarking partnership phenomenon has not been the subject of any previous in-depth scientific analyses. None of the researchers has performed theoretical analyses in terms of the possibility of benchmarking adjustment to the needs of cluster members in the aspect of development of the cross-organisational partnership relations paradigm.

The attempt to present the essence and characteristics of benchmarking partnership of cluster enterprises and to determine the key factors facilitating the establishment of this form of partnership is a response to the identified gaps in the knowledge concerning that concept of partnership. It must be emphasised that benchmarking partnership is a form of partnership cooperation justified for the use by cluster companies, because of its features that promote mutually beneficial exchange of information concerning the results achieved and the best practices they use in different areas of their activity.

The research procedure has been based on indirect research focused on analysing literature sources and deductive reasoning.

The essence of intra-cluster benchmarking partnership

The concept of benchmarking is so vast and flexible that this process might be adjusted to conditions of functioning of different types of social and economic structures. The possibilities of benchmarking implementation by cluster companies, as a process supporting continuous improvement of benchmarking partners, should be recognised and assessed by comparison of cluster properties and features of partnership relations with the general assumptions of classic benchmarking.

An attempt of graphical representation of the method of benchmarking partnership implementation of enterprises within a cluster has been made on the basis of the following categories: cluster, partnership of enterprises, benchmarking, partnerships in cluster and benchmarking partnership of enterprises (Figure 1).

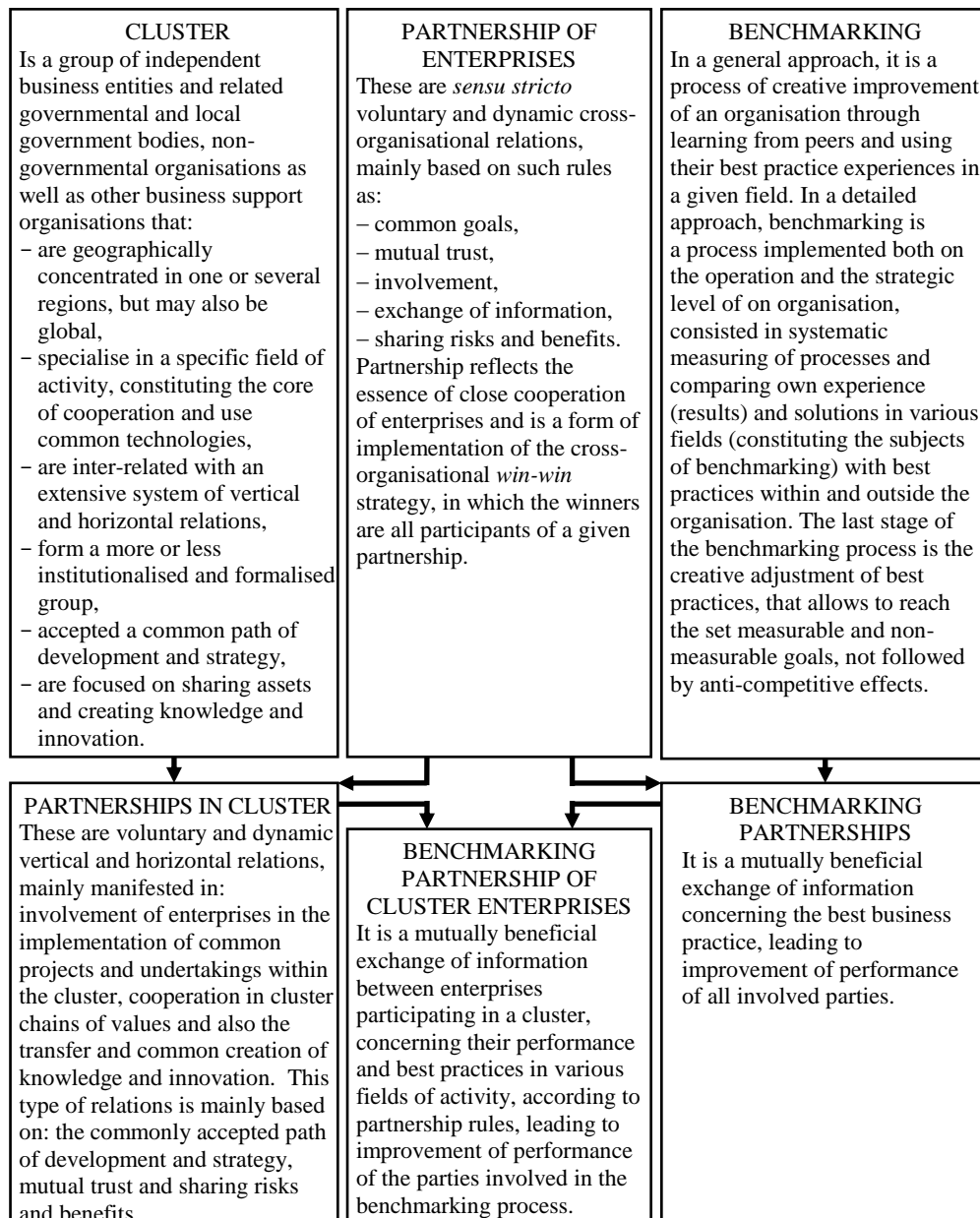


Figure 1. The essence of benchmarking partnership of cluster enterprises

Source: Author's own work

It is a formative approach to the conceptualisation of this form of partnership. The comparison of the scope of the five categories listed above gives rise to a conclusion that the essence of benchmarking partnership of enterprises within a cluster is a mutually beneficial exchange of information between enterprises participating in a cluster, concerning their performance and best practices in various fields of activity, according to partnership rules, that leads to improvement of performance of the parties involved in the benchmarking process.

The implementation of the benchmarking partnership is justified by cluster enterprises due to the properties of the cluster and the occurrence of key factors determining the success of the benchmarking partnership, as well as the character of the benchmarking process.

As a result, the existing cooperation of enterprises in various areas within the cluster may limit or eliminate potential barriers in the process of active benchmarking due to the fact that:

- 1) benchmarking partners know each other, which reduces the time required to gain overall information concerning the partner,
- 2) each benchmarking partner recognises the added value of benchmarking, in form of gaining benefits from processes and operations improved by the other benchmark partner,
- 3) growing trust and involvement of all parties of the cross-organisational relations increases the possibility of improvement of relation competences,
- 4) cooperating parties of the relationship strive for tightening the cooperative relations in order to gain benefits resulting from the effect of synergy and limiting the number of conflict-triggering situations.

The characteristics and the key factors facilitating the establishment of intra-cluster benchmarking partnership

While analysing the issue of benchmarking partnership of enterprises in a cluster, it is also worth trying to identify its characteristics (features), following the principle of cohesion with the properties of partnership of enterprises and the benchmarking scope.

It has been assumed that benchmarking partnership of enterprises forming a cluster is characterised by certain essential features and inseparable elements, which include:

- 1) focus of benchmarking partners on sharing information assets,
- 2) focus of benchmarking partners on reciprocity encompassing:
 - mutual beneficial exchange of information for benchmarking purposes, with or without the participation of a moderator,
 - mutual trust and respect,
 - mutual obligations resulting from arrangements and agreed rules,
- 3) the process of learning from peers,
- 4) the process of communication, that takes place on various levels and using various channels, involving particular effects,
- 5) equal position of the benchmarking partners, without signs of domination of any of the parties,

- 6) implementation of the cross-organisational *win-win* strategy,
- 7) voluntary participation of cluster members in the intra-cluster benchmarking process, according to the accepted partnership rules,
- 8) focus of benchmarking partners on achieving particular goals, both individually and within the group,
- 9) various degree of sustainability, intensity, involvement and formalisation of benchmarking cooperation within the cluster,
- 10) dynamism and maturity of cross-organisational relations in benchmarking undertakings within the cluster,
- 11) commonly agreed and shared rules of conduct of benchmarking partners, constituting an ethical code,
- 12) respecting the laws,
- 13) the risk in the process of benchmarking process management in a cluster, among others related with:
 - occurrence of organisational and legal issues,
 - choosing an improper benchmark partner,
 - opportunism of either of the parties,
 - exaggerated expectations and over-estimating benefits from the implementation of the benchmarking partnership,
 - occurrence of dysfunctional conflicts,
 - violation of laws and ethical rules,
 - breaching the terms and conditions of a contract,
 - lack of benchmarking partners' awareness of the time required to achieve the planned measurable benefits.
- 14) co-financing of the benchmarking undertaking (e.g. covering the costs of design and maintenance of a benchmarking information exchange platform, the costs of benchmarking training and the costs of meetings of working groups),
- 15) strategic aspect of the benchmarking partnership in a cluster.

It must be assumed that the inseparable elements characterising benchmarking partnership of enterprises in a cluster, are the participants of the cross-organisational relations. The researchers dealing with the benchmarking process use the following terms:

- 1) "benchmarking partners" (Elnathan, Kim 1995, pp. 347, 349, 352; Bendell, Boulter, Gatford 1997, pp. 150-151; Węgrzyn 2000, pp. 170-171; Ziębicki 2007, p. 81; Szydełko 2015, pp. 456, 462),
- 2) "benchmarking partner relationship" (Bendell, Boulter, Goodstadt 1998, p. 125),
- 3) "benchmark-partner" (Kowalak 2009, p. 33; Szydełko 2014, pp. 526-527; Szydełko 2015, p. 461),
- 4) "partners in benchmarking cooperation" (Ziębicki 2007, p. 84).

Appropriate building and development of benchmarking partnership within a cluster requires relevant methodological guidelines, including the knowledge of the internal and external facilitating factors for establishment of this form of partnership. Considering the specific character of clusters, 9 internal (corporate) and 20 external

factors for establishment of intra-cluster benchmarking partnership have been determined (Table 1).

Table 1. The key internal and external facilitating factors for establishment of benchmarking partnership by the cluster enterprises

Internal facilitating factors for establishment of intra-cluster benchmarking partnership:
<ul style="list-style-type: none"> • positive attitude of the management towards the idea of learning from peers within the cluster • wide knowledge of the leadership on benchmarking partnership • positive attitude of team members towards the idea of learning from peers within the cluster • relational competence of the enterprise • wide knowledge of team members on benchmarking partnership • experience in knowledge, information and internal communication management • previous experience in effective implementation of benchmarking • risk management capability in building cluster relations • capability to cover the expenses related with benchmarking within the cluster
External facilitating factors for establishment of intra-cluster benchmarking partnership:
<ul style="list-style-type: none"> • high level of mutual trust in a cluster • social proximity of enterprises within the cluster • implementation of joint projects and undertakings within the cluster • focus of potential partners on reciprocity • effective communication system supporting the exchange of information • cognitive proximity of cluster members • mutual understanding of benchmarking motives • convergence of benchmarking goals set by the enterprises • perceiving benchmarking partnership as low-risk cooperation • equal rights and benefits for benchmarking partners • organisational closeness of enterprises within the cluster • symmetry of involvement of enterprises in fulfilment of benchmarking goals • adaptation capability of cluster benchmarking companies • symmetry of involvement of resources for benchmarking purposes • possibility of using the IT tool in benchmarking • medium or high level of cluster maturity • geographic proximity of enterprises within the cluster • balance between short-term and long-term benchmarking goals • critical mass of the cluster • institutional closeness of enterprises within the cluster

Source: Author's own work

Considering the significance of factors and their impact on the shape of intra-cluster benchmarking, internal (corporate) factors and external factors within the cluster and the benchmarking group are crucial. In case of external factors originating in the macro-environment, the impact on that form of cooperation of enterprises

within the cluster is much weaker and less evident. That is why these factors were not included.

Summary

The purpose of conceptual considerations was to indicate the essence and the features of benchmarking partnership of cluster enterprises and to identify the key factors facilitating the establishment of this form of partnership. It should be noted that this concept is undoubtedly a response to the needs of today's enterprises forming clusters, that search for solutions allowing to increase efficiency and effectiveness of performed processes, to improve the competitive advantage of their individual companies and the whole cluster. Thus the idea of intra-cluster benchmarking partnership is a new way of thinking about the creation of competitiveness of enterprises within a cluster. It is consistent with the previous systems of cooperation of cluster members, aiming at: stimulation of partnership in different fields of activity, developing the external relation capital reflected in building a firm framework of multi-dimensional cooperation, and also using the potential of cluster-like structures (meso level) in gaining benefits resulting from the effect of synergy.

It must be emphasised that the relations between benchmarking partners within a cluster should fulfil the real idea of benchmarking and partnership, being manifested in enterprises' involvement in the process of creative improvement through learning from cluster peers and using their experience, that is verified practices developed in a given field of activity. Mutual beneficial exchange of benchmarking information between partners within the cluster should take place in conformity with the law and the ethical rules.

The described analysis has confirmed the correctness of the thesis. It has been demonstrated on the theoretical background that the fulfilment of the benchmarking partnership concept is justified by companies operating in the cluster environment, due to the distinctive features and key properties of the cluster, fostering partnerships and the process of learning from peers through exchange of experience and information concerning verified and model practices.

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THE ROLE OF SOCIAL NETWORKS IN BUILDING CULTURAL CAPITAL IN RURAL TOURIST AREAS – CONCEPTUALIZATION OF THE RESEARCH METHODOLOGY

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Abstract: The essence of the development of tourist areas is their intersubjectively shared attractiveness due to various values that are not available in the tourist's place of residence, including cultural attractions. The tourist offer is a resultant which depends on the local specificity and patterns of consumption imposed by the dominant culture, not requiring high cultural competences. Because tourists often enter into deeper relationships with the subjects operating in the tourist areas, they engage members of local communities to expand their own networks of relationships. The authors of the paper are interested in the issue of the capacity of network of relations in the context of effective shaping of the social and cultural capital of the region. Due to the shortage of this type of research, a methodological concept was presented based on an analysis of available literature including similar research and previous own pilot studies.

Key words: cultural capital, rural areas, social networks, tourist region

Introduction

One of the fundamental features of modern society, referred to as information, is the development of digital technologies and their impact on social life. The effect of this development is mainly the creation of cyberspace which is a new environment of human functioning and at the same time a product of symbolic culture. An often discussed problem is the influence of this environment on social relations, their creation and break-up. The literature indicates that the view about cyberspace positive impact on the creation and maintenance of social ties prevails (Benkler 2008, pp. 370-371). However, the problems associated with imperfect communication through digital media are not underestimated. First of all, this concerns the issue of trust in information, its uncertainty and manipulation (Golka 2008).

In the virtual space communities, a return to active co-creation of cultural content is observed, which was previously characteristic of the pre-industrial society. In the context of such culture-forming co-operation, L. Lessig uses the term "remix culture" (2014). Both virtual and traditional (rural) communities create their cultural capital in a different way in relation to urban society. Urban societies are treated as centers of cultural industry, in which recipients of cultural content are treated only as consumers. As K. Krzysztofek writes, "Once the culture has started to be sold, it is a cumulative process; institutions become economic entities, regardless of their ownership status, they become part of the leisure time industry focused not only on satisfying the needs of local art lovers, but on tourists - consumers, on visitors instead of residents "(2005,

p. 44). In an industrial society that is also perceived as a modern cultural content society began to be subject to clear economization. This is also evident in the scientific and journalistic discourse, in which the concepts of cultural capital, cultural goods or intellectual property began to be applied.

The authors of this text ask about the way of treating own culture in rural communities located in tourist regions. Is it more influenced by the copying of patterns of activities focused on the development of cultural industries, or to a greater extent rural communities may be subject to the impact of online communities built around activities that autotelically treat the content of culture they produce? Spaces with identity lose their autotelic character through instrumental treatment for promotional activities, which is typical for the creation of marketing strategies for cities (Czarnecka, Albrychiewicz-Słocińska 2017). The purpose of the undertaken considerations is to analyze ways of creating cultural capital in rural tourist areas through cooperation of various institutional and non-institutional actors. At the institutional level, it is cooperation of self-government institutions and creation of inter-municipal associations such as Local Action Groups. On the other hand, at the non-institutional level, these may be activities related to the opening of the community to external cultural influences while at the same time creative enrichment of one's own culture through the use of borrowed components. In both cases, it may contribute to the increase of competitiveness of these areas in relation to metropolitan centers, strengthening such competitiveness factors as: local leaders' activities, support from external institutions or even the government's action (Xu, Zhang, Tian 2017; Petrović et al 2018; Birendra et al 2018).

The development of cultural capital can be equated with the increase of the diversity of cultural content and the increase of cultural competences of recipients of this content. Therefore, the question about the degree of rural communities members openness to external influences seems to be important. I. Bukraba-Rylska indicates that in previous concepts of the cultural model, the village was characterized by features such as primitivism contrasted with progress, archaic and conservative treated as closing itself to external influences (2013, p. 479). However, in the case of the Polish village, mutual cultural influences between the village community and nobles were emphasized, which means that the tendency to creatively use cultural patterns from the "foreign" environment was the rule rather than the exception (Bukraba-Rylska 2013, pp. 481-482). Regardless of views on the autonomous creation of cultural capital in rural areas, rural culture, also known as folk culture, is a resultant of the activity of local actors and external actors influencing the countryside. While in the industrial era it was the impact of new, formalized institutions (including schools, cooperative and political organizations), in the post-industrial society, such incidental actors - tourists - are becoming more and more popular.

The specificity of a given region attracts certain categories of tourists, and their presence influences the shaping of the space visited in accordance with their needs. A characteristic example is the Częstochowa subregion, with its far-reaching sacralisation of space, which is the effect of a long-standing tradition of pilgrimage to Jasna Góra, a place of worship important to the followers of Catholicism. It was

noticed that the tourist-pilgrim does not pay attention to other (i.e. non-sacral) cultural elements (Skolik 2005). It can be said that there is a positive feedback between the tourist's axionormative system and the actions of the actors of the local scene in favour of shaping the public space. Adapting to the narrow profile of tourism by agreeing to the domination of one element (or complex) of culture may paradoxically lead to depletion of local cultural capital. It is also pointed out that the development of tourism in rural areas may lead to imbalance in the functioning of rural communities. "The increasing dependence on tourism may also pose threats on the sustainability of traditional agriculture and rural livelihoods. Therefore, impacts of tourism on the preservation of agricultural systems and the hosting communities should be critically assessed" (Su et al. 2018, p. 2).

Methods

Methodological approaches in tourism research in rural areas

In research on tourism in rural areas, researchers focus on such issues as: marketing of tourist services (Sowier-Kasprzyk et al. 2010; Sowier-Kasprzyk 2011), competitiveness of regions, impact of tourism on sustainable development (Xu, Zhang, Tian 2017; Petrović et al 2018; Birendra et al 2018). In addition, the following research problems are also indicated: shaping the regional culture through tourism, folklore phenomena, support for creating a new identity, relations between the inhabitants of rural areas and tourists, increasing the impact of tourism in the regions (Košťálová 2016, p. 1034).

Such a wide range of issues raised in the case of rural tourism research also requires a multilateral methodological approach. Due to the specificity of the studied populations, i.e. relatively small groups of rural and relatively territorially dispersed tourist micro-enterprises, the conducted research is often a case study. Mainly, qualitative research methods are used, such as: structured and semi-structured free interviews (Paniccia, Leoni, Baiocco 2017, p. 8), observation, document analysis (Dalonso, Dalonso 2017, p. 644), including website content and personal documents. A holistic approach in such case studies also requires the use of longitudinal tests, often associated with long stays in a given area (Xu, Zhang, Tian 2017, p. 8; Birendra et al 2018, p. 7).

In the context of tourism in rural areas, however, there are few studies that take into account the flow of cultural capital in social networks. Some studies focus on the description of the use of social media (Facebook, Google+, LinkedIn, Twitter, Instagram) and virtual networks to share cultural capital by tourists, which influences their decisions regarding the choice of place of travel, stay, services offered and how to meet the needs (Hays, Page, Buhalis 2013; Oliveira, Correia, Fernandes 2017). In other cases, researchers focus on the analysis of social networking dynamics, however, at the expense of its narrowing to a certain category of actors, i.e. entrepreneurs serving tourism: "The networks and social capital that function in one context are different to those that function in another context [...] However, the identified network

structure, as well as the extent of the bonding and bridging forms of social capital, reveals the functionality of wildlife tourism microentrepreneurship in a rural setting...“ (Birendra et al 2018, p. 14). This limitation is necessary due to the possibility of conducting interviews with social actors or the possibility of obtaining data from them in a different way. The description of the network dynamics requires obtaining data about all the actors creating it, which becomes possible when selecting a subnet (a significant part of the network, which itself is also a network). In such cases, the research is limited to the analysis of social capital, but without the analysis of the flow of cultural capital.

Creating open social networks in rural tourist areas

Creating cultural capital can be seen as the effect of transformation of various forms of capital, including social capital (Kukowska, Skolik 2013). In socio-economic terms, the creation of social capital depends on the shape of social networks generated by individuals, which thus balance their access to resources. If cultural capital is considered from a resource point of view, then the visited facilities and the space in which they are located are elements of the cultural capital. This space can be treated as a public, secondary (semi-private) or private territory regardless of its ownership status (Bell et al. 2004, pp. 346-349). Balancing access to goods within the network created by the community promotes competitiveness with other communities. Competitiveness, however, requires innovation, and this is possible by allowing "strangers" to own social networks. When networks tend to monopolize resources, this promotes hierarchization, while balancing processes work for the social structures described as markets (Kukowska, Skolik 2016). It seems that in tourist villages, the initially communal nature of social relations is transformed into network structures. The cooperation of a large number of actors is important here, because the greater their diversity, the richer is the cultural capital. It can be assumed that the direction of transformation of one form of capital into another is influenced by the type of social organization. Market and network structures due to the openness to cultural influences may be conducive to the transformation of social capital into cultural capital. On the other hand, communities and hierarchies, due to closing themselves to such influences - vice versa - may be conducive to the transformation of cultural capital into social capital. However, these two opposing transformation processes should not be taken dichotomously. Network structures are also conducive to building social capital, but this is not happening as spontaneously as in communities.

In the tourist village, which is a mix of the market and community, the social network of social organization (Kukowska, Skolik 2017a) is increasingly dominating. Openness to foreign tourists is not only conducive to enriching one's own culture with new elements, but also to increasing the diversity of categories of social actors that build this network. One can ask a question about the limits of the capacity of such a network. Does increasing the number of links created with tourists, locally operating units and institutions weaken bonds with each other? If the number of actors in the network exceeds 150, it can be exchanged, and thus to break the existing ties with members of the local community, family and other "significant others". This numeric

index is referred to as the Dunbar number. Examining primates, R. Dunbar noted that for *Homo sapiens*, the original groups were just 150 individuals, and groups of this size were the natural social environment of man (Dunbar 2017, p. 98). It is worth noting that in today's society, not only people who have contact with face to face but also virtual identities join the network of friends. As real members of the group, even characters from popular culture are treated, with whom individuals have contact through television. "People who often watch TV simply believe that they have more friends than they really have" (Szlendak, Kozłowski 2008, p. 98). A returning tourist, familiarizing the explored places, creates new ties with members of the local community. Therefore, it can be expected that in the case of tourists and people forming networks with it there are fewer "fictitious" social relations, and at the same time lower absorption of popular culture.

Departure from mass culture coincides with the new phenomenon of prosumption, observed in cyberspace and among various fan communities (Bomba, Stunża 2014). Characteristic for prosumption is the active creation of cultural content by individuals who are also consumers of this content. Participation in the co-creation of cultural content can also be observed in rural tourist areas, where tourists give new values to the space they visit. As a consequence, it becomes a seed to grow cultural capital produced by various categories of actors: tourists, residents, public and private cultural institutions, tourist-serving companies (mainly family), as well as self-government authorities, religious institutions, social organizations and internet travel websites.

Results and Discussion

Actors producing cultural capital in social relations networks can be categorized according to three dichotomous criteria: 1) acting institutionally and non-institutionally; 2) insiders and outsiders; 3) actors that create real, direct relationships and the ones that create virtual, mediated relationships. The authors assume that such categorization could be more beneficial for the analysis of information flows in social networks than the categorization of actors due to their functions on the tourism market (ie tourists, residents, entrepreneurs, public institutions, social organizations, etc.).

In the pilot studies conducted by the authors in 2017 among tourist representatives of family micro-enterprises (Kukowska, Skolik 2017b), it was noticed that they do not create relationships with locally operating cultural institutions. It seems that cultural capital is separately generated and passed on by institutional and non-institutional actors. In rural tourist areas, it's the tourists who as outsiders become key nodes in the networks of locally generated cultural capital. Their activity in the consumption of cultural goods offered by local institutions, participation in cultural events, exploration of space and familiarization with local history releases the flow of cultural capital between cultural institutions and residents. It happens that these are tourists who provide information about culturally important objects in the region to people doing agritourism, thereby strengthening their sense of identity with homeland.

While social networking sites can be used to share cultural content (e.g. by posting photos, place descriptions and opinions), thus enhancing the cultural capital of the

tourist region, Internet users also establish cooperation with cultural institutions in order to disseminate common cultural heritage in cyberspace. An example is the cooperation of the main national institutions with Internet users regarding the cataloguing of photographs of monuments in a dozen or so countries (Skolik 2013). The authors' research indicated that some of the locally operating institutions are also willing to share cumulated cultural goods in cyberspace (Kukowska, Skolik 2017c). The shaping of the social environment, which is cyberspace, has led to inflation of social networks, as Internet users have emerged as new important actors in these tourist areas.

Taking into account the issue of transformation of social capital into cultural capital, the question of strengthening the network of relations with tourists, who are still one of the main entities generating flows of cultural capital, becomes important. Consequently, one should answer the question about the reasons for tourists returning to specific places. It can be assumed that the causes of this phenomenon include: the need to separate from their social environment and create new identities, the need to experience the "authenticity" of social relations, participation in periodically organized cultural events and treating the place of temporary stay as a good quality "base camp". Another question that arises is who they first of all create strong ties with - insiders or other outsiders.

Conclusions

Undertaking research on the relations between social networks and shaping cultural capital poses a number of methodological problems. Focusing on the analysis of network dynamics in the long run becomes all the more difficult as wider network of relationships one analyzes. Thus, it raises problems regarding the analysis of the capacity and flexibility of social networks. Units form networks not only through face-to-face contact, so it is also important to set the direction of network expansion, and thus to identify new, significant actors (who and how is becoming a hub of social networks related to tourism in rural areas?). Only taking into account the above remarks, it is possible to try to determine how cultural diffusion on rural tourism areas favors the strengthening of local cultural capital and how information flows in social networks among various categories of actors participating in the tourism market in these areas.

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THE COMPANIES' INNOVATION ECOSYSTEM

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Abstract: Innovations create a competitive advantage of enterprises. It seems that during 14 years of operation of the funds that support companies' investment in innovations coming from the EU budget, enterprises should develop an appropriate ecosystem of innovation that would allow them to efficiently develop and implement new products or technology with cooperation in other entities. The paper will address the issue of the enterprise innovations ecosystem in relation to current market challenges. In addition, the paper presents selected results of research carried out in the period from November to December 2017 on a sample of 400 Polish enterprises obtaining support for development through innovation from the European Union budget.

Key words: innovation ecosystem, innovation, technology transfer

Introduction

Innovations are one of the most important factors for company's competitiveness. For successfully implemented innovations companies must optimize their resources that allow them to do so. This means that they must, on the one hand, properly manage their own innovation system, and on the other hand, create their own innovation ecosystem.

The main objective of the article is the analysis of the possibilities of building an efficient innovation ecosystem by the analysed enterprises, which significantly contributed to the growth of their innovation

The European Committee for Standardization determinates the innovation management system as a system which consists of all the activities that are necessary in the process of creating innovations including (European Committee for Standardization 2013, p. 4):

- organizational conditions,
- leadership in strategy and innovation,
- planning activities to increase the market success of innovation,
- development of factors conducive to and driving the development of innovation,
- innovation management process,
- tools assessing the efficiency of the innovation management system,
- activities enabling the improvement of the innovation management system,
- innovation management techniques.

Good developed and effective working company's system of management innovation gives the basis for creating well operated innovation ecosystem with its inside and outside relations.

This paper assumes that at the base of company's system of management innovation and further innovation ecosystem lies two factors. One of them is the concept of the development of 4th generation of R&D and innovation management which began about 1990, but its evolution and adoption accelerated since 2000. In this concept value is defined as either internally applied or externally delivered new capability and architecture that meet competitive economic and emotive needs. These needs typically fall into five categories, which are (Narayanan, Colarelli 2010, p. 140-141):

- health, safety and comfort protection,
- productivity improvements,
- lifecycle cost advantages,
- technology integration or compatibility to “fit”,
- emotional design appeal.

Accordance to this concept the management of innovation, special radical innovation is based on 12 principles (Narayanan, Colarelli 2010a, p. 141-142):

- a border definition of innovation with a larger scope is required to be competitive in globally interconnected economy and to effectively guide organisations that include industrial corporations, governments, foundations, and universities,
- innovation management that create new sustainable value depends on lifecycle management, value is created then a new competitive capability is externally delivered to customers or users,
- competitive capabilities are built from layered “capability stacks” that include; people with knowledge, tools, technology and processes, business models with partners, industry / market/ structure,
- capability and architecture are the core building blocks of economic value and competitiveness,
- markets have a new architecture with dual distributions channels - one for sales transaction for delivering product or services, second for knowledge,
- new business process is required which drives innovation as a business process based of stakeholder's needs analysis. The process guides the creation of scenarios for solution to be tested and developed in “innovation and application labs” with technology partners like universities,
- strategic planning needs to manage several related dimensions of technology as part of capability planning including product/service development, tools/processes lifecycles, innovation roadmaps, technology portfolio, internal R&D and external acquisition (open innovation) and the discovery of unmet needs for radical innovation in existing and emerging markets,
- new value proposition needs to be defined to target solution for problems as opportunities with the value of the solution defined for multiple stakeholders,
- new types of “T-shaped” innovation leaders are needed,
- new types of R&D labs as “innovation labs” and “application labs” need to be created to further accelerate the rate of innovation and supplement incubators and accelerators,

- new organization of innovation process is needed with a chief innovation officer who is a process manager and a chief technology officer at operational level,
- innovation operates in an organizational ecology with groups of partners who compete with different capabilities and architectures.

Second is determined by well-designed company's innovation development system. According to A.Dringoli designing the innovation development system requires its relevant characteristics, that is : dimension, flexibility degree, integration degree of R&D activities. Where dimension is represented by the amount of employed resources; number of workers and invested capital in R&D activities, flexibility of the system is expressed by the variety and the rapidity of innovative processes the system is capable of developing. And the degree of integration of R&D activities is the level of R&D activities the firm carries out internally for producing innovations. In accordance with the descriptions of innovation development system the firm can be organized to perform the innovation cycle in two ways - directly from the basic research activities to the applied ones and the product development, or otherwise it may only perform some phase of the cycle, externalizing the others (Dringoli 2009, p. 134).

The innovation ecosystem can be defined as a set of links between different entities oscillating around a specific challenge, cooperating to provide comprehensive solutions (Kastalli, Neely p.4). Essentially, such an ecosystem is created by all organizations whose common goal is to develop through/by innovation. Such a group of connections is characterized by symbiosis not only in terms of technical and technological resources possessed, including knowledge, but also with responsibility to implementation of development processes, absorption or commercialization of innovations (Fransman 2014 p. 7-8).

Therefore, if we would like to talk about innovation ecosystem first the company should perform mapping or verification all of entities that could deliver all necessary value to the company's innovation processes. Then verify their business models and ways of providing value. In addition, determine the scope of their capabilities and competencies that are necessary for the organization to be able to meet the objectives set for the ecosystem itself.

Moreover, in order to be able to talk about the innovation ecosystem, its potential should be verified in the area of (Šinkovec 2014, p. 2) e.g.:

- analysis of relations and connections between participants of the ecosystem,
 - identifying the flow of funding for ecosystem participants,
- as well as (own work based on Kastalli, Neely, p. 5):
- gaps in innovation level of ecosystem participants and real possibilities of their equalization - conducting innovation audits,
 - indication of new areas of increasing the level of innovation,
 - creating mechanisms that improve the processes of absorption and diffusion of innovation at the level of a given innovation ecosystem.

Within well operating company's innovation ecosystem, innovation itself should be perceived as an interactive system of creating value. The European Union

recommended that the following factors should be assessed (High Level Group on Innovation Policy Management 2013, p.14):

- managing a complex process of innovation on many levels,
- opportunities to change the perspective from regional to global economy,
- using a bottom-up approach to analyse the possibilities of protecting strategic competences and market orientations,
- the possibility of redesigning management tools,
- analysis of cooperation between science and business and its assessment mechanisms,
- impact assessment on competitiveness,
- relationships occurring at various levels of management and between sectors of the economy,
- the possibility of stimulating entrepreneurship,
- facilitating the social acceptance of innovation.

And the answer for the following questions should be given (High Level Group on Innovation Policy Management 2013a, p.14):

- whether there will be a demand for the results of the research being carried out,
- whether it is possible to carry out research based on recognized global standards,
- what are the general needs in terms of innovation requirements and competitiveness,
- which of the legal regulations must be corrected, subjected to changes in interpretation or eliminated?

Methodology of the research

The research, whose selected results were presented and discussed in this article, was carried out among 400 Polish, randomly selected, production companies from all over the country in 2017. The aim of the study was to obtain information on technology management enterprises and conditions of innovation in enterprises. The scope of the research included:

- analysis of technology management in the enterprise,
- analysis of barriers and benefits resulting from the purchase of technologies to date,
- analysis of technology management strategies in the company,
- analysis of the company's innovation level.

The study used the CAWI / CATI method based on the electronic version of the questionnaire, which consisted of 32 questions divided into 5 thematic modules and was built based on closed questions and the possibility of multiple and in some cases multiple choice of responses. The structure of the research tool is presented in Table 1.

The sampling frame included 400 enterprises operating in Poland, which raised funds for development through innovation from the European Union budget. As a result, 400 enterprises took part in the survey, including 93 micro, 157 small, 127 medium and 23 large business entities.

Table 1. Structure of the research tool

Thematic module	Number of questions	The objective of the thematic module
Module A: Basic data about the enterprise	6	The purpose of this module was to define: <ul style="list-style-type: none"> – the scale of the company's largeness, – the legal form of the company, – cooperation within the cluster including the key cluster, – the industry in which the company operates, – value of generated revenues, – the geographical area of the company's activity.
Module B: Analysis of technology management in an enterprise	11	The purpose of this module was to define: <ul style="list-style-type: none"> – the age of technologies used by the enterprise, – portfolio of owned intellectual and legal property, – does the enterprise have its own R & D department and the scope of research conducted in it, – cooperation with other entities in the field of research, – reasons for not conducting research in the framework of your own R & D department, – the current method of obtaining technology, – sources of financing for the purchase of technology and the value of recent purchases in this area.
Module C: Analysis of barriers and benefits resulting from the purchase of technologies to date	2	The purpose of this module was to define: <ul style="list-style-type: none"> – barriers related to the purchase of new technologies, – benefits resulting from the acquisition of new technologies.
Module D: Analysis of technology management strategies in the company	5	The purpose of this module was to define: <ul style="list-style-type: none"> – scope of monitoring the development of technologies by enterprises, – scope of technology implementation and development of new products, – aspects of knowledge management in the enterprise, – policy in the field of intellectual property protection in the enterprise.
Module E: Analysis of the company's innovation	8	The purpose of this module was to define: <ul style="list-style-type: none"> – places of innovation in planning business activities, – sources of innovation used by the enterprise, – average period of creation of innovative products in the enterprise, – scope of cooperation between the company and other organizations in the area of new product development, – accepting failure in the development of a new product, – the area of further investments in innovations, including new technologies.

Source: Own study

Results of the research

Considering that the target group was represented by enterprises acquiring support funds for development by innovations from European Union funds, it is surprising that only 11.8% of all surveyed enterprises declared to belong to the area of national smart specializations, and 66.3% could not clearly determine whether they belong to any cluster, especially the National Key Cluster.

Moreover, 22.1% of the analysed companies used in their basic production processes technology older than 10 years and 20.6% between 5 and 10 years. It is interesting that 21.7% of the surveyed companies use two or three years of technology for these processes and 15.8% companies use technology, which is not older than one year.

According to the conducted research, in case of 53.3% of the surveyed companies, they have their own research and development departments and, based on them, most often run:

- development works - acquiring, combining, shaping and using the currently available knowledge and skills in the field of science, technology and business and other knowledge and skills to plan production and creating and designing new, changed or improved products, processes and services, e.g. experimental, development of prototypes, testing of products, processes and services - this takes place in 36.7% of cases of the surveyed companies,
- implementation works - they consist in the development of methods and techniques for the application of research results in industrial production, they constitute the transfer of research results from the laboratory scale to industrial scale - which takes place in 34.9% of the cases of the surveyed companies.

Research also shows that surveyed companies that intend to develop and implement innovations will be in:

- 22.2% use their own R&D facilities,
- 26.6% cooperate with national R&D institutions,
- 22% cooperate with domestic machinery and equipment manufacturers,
- 20.4% have the intention of establishing cooperation with foreign machinery and equipment manufacturers.

The results are shown at the figure 1.

Moreover, companies were asked to indicate the main sources of creating innovations, and so, for:

- 9.3% of them are employees of the company,
- 6.1% buyers of products, in 8.3% competition,
- 11.1% trade fairs and exhibitions,
- 11.6% Internet,
- 5.7% of national R&D institutions,

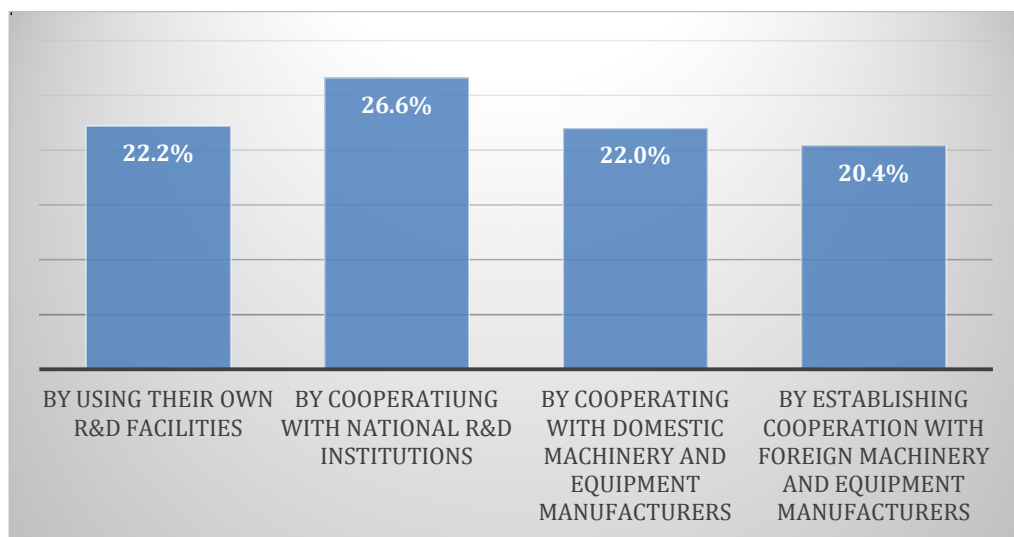


Figure 1. The way of developing and implement innovation by companies

Source: Based on own research

- 2% foreign R&D institutes,
- 3.4% universities (including technical universities),
- 0.8% innovation brokers,
- and in 3% consulting companies.

When asked about possible areas of cooperation with other entities in the field of innovation development, companies replied that they intend to cooperate in the following fields:

- conducting research and development works - 24.8%
- purchase or lease of technological lines used for prototyping - 20.8%
- improving professional qualifications of proctors - 19.9%,
- 12.7% of the surveyed companies will not intend to undertake such cooperation.

These results are shown at the Figure 2.

It is also interesting that in 85.5% of cases, companies intend to invest again in innovation, and as the main area of investment declare: the development of new products (12% of indications) and the purchase of new machines and devices (13.7% of indications).

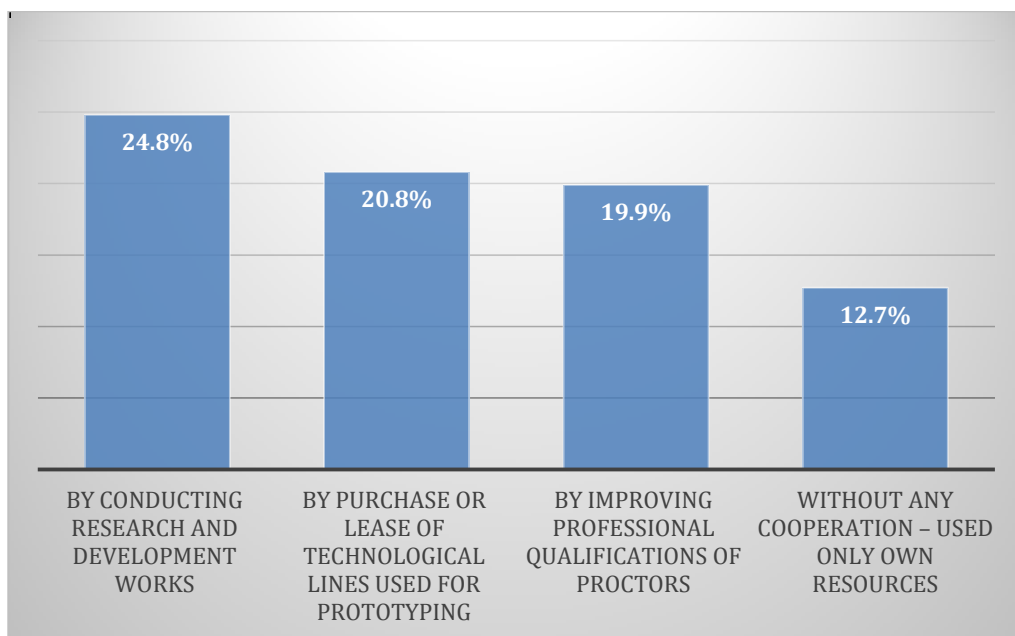


Figure 2. Possible areas of cooperation with other entities in the field of innovation development

Source: Based on own research

Discussion

Selected research results clearly indicate that the analysed enterprises, despite the declared development of companies by innovation, are at an early stage of development of their own innovation ecosystems. Such an ecosystem assumes not only the analysis of the company's potential in the field of innovation development, but its willingness to cooperate with other organizations for this purpose. As the research shows, a small number of respondents of such enterprises assume such an implementation of innovation processes. It is comforting that all the surveyed companies can fill in to the frame of regional (or national) innovation strategies, which will show in its intend in further investments in new technology and products. Unfortunately, despite the 14-year history of European Funds, is saddened by the fact that universities (also technical universities) are not a main source of new ideas for innovation for these companies. Like innovation brokers, their potential is marginalized by the surveyed enterprises. In this case the dominant role of the fair (industry exhibitions) or the Internet could still be seen.

Summary

The conducted research indicates a certain trend, which the author of the paper notes from almost 12 years of experience in the field of research on the organization's innovativeness and technology transfer processes. Namely, enterprises recognized EU funds as their main source of external financing of investments in innovations and they perfectly match the requirements set in such projects. Unfortunately, it is only recently that their main requirement is full cooperation of R&D institutions, including universities or other enterprises, to implement innovations. On the other hand, also recently, universities have seriously addressed the issue of technology development in terms of its practical application in industry. This situation meant that enterprises could only create an innovation management system, not an innovation ecosystem. An ecosystem that is based primarily on external relations of the enterprise. It seems that one of the ways that companies can create its innovation ecosystems is not only the development of other sources of external investment financing, such as Private Equity Funds, but other legal solutions that will push R&D institutions to create stronger connection in cooperation with companies at the whole R&D fields.

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TOURISTIC AREAS OF THE NORTHERN PART OF KRAKOW-CZĘSTOCHOWA UPLAND AS A CONSUMER GOOD AND CULTURAL SPACE IN DIGITAL MEDIA

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Abstract: Cultural space of tourist areas can be treated as a common good, whose beneficiaries are mainly their inhabitants, companies related to tourism, tourists as well as cultural institutions and local government institutions. Different actors may value in a different way the elements of the material and immaterial culture of the region, thus influencing their consumption. The supply of the content of symbolic culture is increasingly mediated by new media, mainly websites. The behavior of tourists in tourist areas may therefore depend on what content and how they are promoted in digital media. The authors present the results of netnographic research on marketing activities, consumer practices and manifestations of prosumer behavior related to the space of Northern Kraków-Częstochowa Upland. The research includes the analysis of the content of selected websites related to this area, which were created both by entities associated with this region and the content of globally functioning tourism-related websites. Authors are also interested in creating relationships between entities that become visible in hyperlink networks between websites.

Key words: culture, space, consumer good, consumption, Krakow-Czestochowa Upland, digital media

Introduction

In the world of fast development of new technologies and progressive globalization the societies undergo various changes concerning among others the sphere of consumption. The cultural sphere and its consumption is also changing. The development of technologies, which is characteristic for postmodern era enables virtual commerce and virtual consumption (Chluski 2007). The traditional patterns of behavior are changing and become displaced by new trends. (Karczewska, Bsoul-Kopowska 2016) One of the characteristic elements of the consumer society is prosumption (pro- from production and – sumption from consumption), which means the blurring of clear distinctions between consumption and production. As W. Patrzalek (2004) points out, the development of prosumption is connected with increasing amount of free time, the need for development as well as possibility to work at home. The consumer becomes at least partly the producer of goods or services which he is going to consume. He creates, designs, provides information, takes part in creating the consumer good or service.

One of the most popular changes in modern consumer societies is virtualization of consumption, which is enabled by the wide use of the Internet by the consumers as well as commercialization of various spheres of human life, including consumption.

The role of the media in human life is increasing (Karczewska, Bsoul-Kopowska 2017).

In the case of tourist regions, a space with the objects located there and promoted as particularly attractive together with cultural events taking place there can be treated as the basic consumer goods. Due to the necessity of satisfying the living needs of people visiting such areas, the infrastructure related to tourism services is being developed. This may impose the necessity of wide cooperation between entities providing services in the field of tourism and entities offering various types of attractions for tourists, what stems from the fact that the tourist industry includes many types of activities (Odzimek 2017, p. 63). In view of the above, the increasing number of entities providing services to tourists leads to an increase in the complexity of the network of relations, through which one can understand both relations of cooperation as well as rivalry. Nowadays, digital media are common tools for promoting both own space and own service activities. The authors of this article are interested in what elements of tourist areas and in what way are promoted via the Internet and what relations can be observed in the case of entities that are key actors in the development of tourist traffic. For this purpose, pilot studies were conducted covering websites concerning the Northern area of the Kraków-Częstochowa Upland as well as global websites, in which Internet users post content about the region, the objects and events occurring there.

An important factor contributing to the popularity of a given area as a tourist region is its availability. It can therefore be assumed that those regions, of which a significant part of space is treated as a public good, will be particularly attractive. As M. Lustofin noted, public space should be treated not as a material being but as a metaphorically captured space of dialogue. In this respect, this kind of public space is opposed to the private space (Lustofin 2014, p. 184-185). This applies not only to the issue of its legal possession, but also to the social treatment of it as private, public or semi-public. As a consequence, such social image of space translates into the degree of its use and sharing with others (Bell et al. 2004, p. 348). However, the polar division into public and private space is narrowed down if we treat it as a certain kind of good. Taking into consideration the availability of a given good and its exhaustibility, a two-stage division is presented, within which public, club, private and common goods are included. The authors noted that they may correspond to various forms of social organization, i.e. hierarchy, community, network and market (Kukowska, Skolik 2016, pp. 311-312). In the case of rural areas, it was assumed that cooperation within the framework of tourism activities facilitates both concentration on the production and maintenance of public goods (architecture, landscape) and leads to the creation of network structure (Kukowska, Skolik 2017a, p. 68). If we take into account the intangible aspect of the social space, the quintessence of which is cyberspace, it does not exclude human inclinations to territorial behavior (Skolik 2013). Communication acts which take place in the Internet sphere translate into activities that have the character of space appropriation, taming it as well as protection against intruders (Skolik 2015).

In the area selected for research, dominated by rural communities, tourism develops mainly thanks to family businesses. The multiplicity of small entities operating in this market contributes to closer cooperation between them manifested in such activities as: „1) mutual sharing of staff providing tourist services; 2) mutual recommendation in case of lack of accommodation; 3) recommending food services in the direct neighbourhood; 4) recommending different types of attractions organized by friendly neighbors” (Kukowska, Skolik 2017b, p. 389).

With the development of cyberspace, the problem of weakening or maintaining ties through Internet communication is being considered. There are questions about the issue of decline of locality through the impact of the global Internet network (Biernacka-Ligięza 2008, p. 411). For various aspects of social life, one can notice support from websites referred to as new new media, created socially by Internet users (Levinson 2010). However, it would be difficult to find examples of synergy between the functionality of such digital media and the needs of local collectivities, despite the fact that these collectivities have the character of communities generating the public good. Paradoxically, some communities associated with new media tend to cooperate with cultural institutions with a relatively higher hierarchy. Such forms of cooperation may have a greater impact on the development of the cultural space of the region, as long as the fears of free access to the content of symbolic culture in the Internet space are eliminated (Kukowska, Skolik 2017c). The aim of the article is to determine how the touristic areas are presented in the virtual space in the consumer and prosumer context.

Methods

The authors chose for the research the area of 9 communes located in the northern part of the Kraków-Częstochowa Upland. There is no systematic research on shaping the cultural capital of this area and with few exceptions there is rather short time of tourist activity development in this region. The authors chose several types of websites and databases for research: websites of municipal offices, official registers of tourist facilities (register of immovable, movable and archaeological monuments), tourist services websites. The authors identified and categorized cultural facilities and events of (potential) importance for the development of tourism. From among a number of portals created by Internet users, three websites for posting photos were chosen (Wikimedia Commons, Flickr, Fotopolska), Polish-language Wikipedia and an OpenStreetMap map service.

The research included the way of presenting objects and events (e.g. the quality of available materials, availability/concealment - what is more or less clearly displayed on websites, popularity - which objects and events appear most frequently, which are displayed higher in the hierarchy (e.g. on the main page). Moreover hypertext links between the websites were studied: social relations networks (cooperation networks), and hypertext links networks as well as the differences between the way of presenting

tourist areas in individual communes, differences in the presentation of particular types of tourist facilities (content).

Analysis of the sub-region of the Kraków-Częstochowa Upland was also based on comparing which tourist facilities, cultural events or other activities are described on the websites of municipal offices, including the official register of monuments created by the National Heritage Institute. Considering marketing activities and consumer practices, the research included the contents of tourist services such as: e-turysta.pl, eholiday.pl, as well as the content of Wikipedia's online encyclopedia. Attention was drawn to the creation of hyperlinks between local government units and tourism entities, which was adopted as an indicator of building social networks. Implementation of research assumptions also included the characteristics of ways to share content for users. The categories of analyzed content were: monuments, protected nature areas, tourist routes, amusement parks, sports facilities, cultural events as well as accommodation and gastronomic offers.

Results and discussion

The surveyed local government units differ between each other significantly in the way they present their cultural space, as well as accommodation and gastronomic bases on their own websites. The favorite in the case of taking care of the tourist image of the commune in the virtual space is Żarki commune. Unlike the other websites, this commune's website redirects users to an individualized website of turystykazarki.pl presenting the tourist values of the commune. A person looking for information within his tourist activity from the main website navigates through the following categories: educational, religious, culinary, organized packages etc. On the website one can also be guided by age criteria of selection: families with children, teenagers, seniors. There is also a description of various types of monuments and events, tourist routes, as well as sports facilities or playgrounds. The website has got a lot of pictures and an interactive map is also available. The opposite of such a rich form of presenting information are the websites of communes containing only brief descriptions of individual monuments presented in the "for tourists" or "worth seeing" bookmarks, an example of which is Przyrów commune website with the description of three sacred monuments. The Poraj commune presents a variety of tourist attractions, from the sports, recreational and cultural complex to the swimming pool and the description of tourist routes, however, there is no information about monuments. On the website of the Lelów commune, 7 tourist attractions were identified, of which 3 relate to the heritage of the region: Ohel - Jewish cemetery, Chamber of the Lelów Region Tradition and the thematic quest "Lelów of two cultures" (The route revealing the historical community). On the dedicated sub-website, however, parishes with illustrative material are presented. The highlighted event is the festival of Polish and Jewish culture "Ciulim - Chulent Festival", which takes place annually since 2003, and the descriptions and numerous photographs from these events create a kind of online chronicle.

Due to the fact that some of the communes present tourist attractions in a limited scope on their websites, the solution is to redirect the user to websites that respond to tourist needs of Internet users. Mstów limits redirection of the Internet users to zakatekjury.pl, a site presenting 16 tourist-attractive places. Lelów sends Internet users to jura.info.pl and lthk.pl. Janów provides the access only to the website of the Jurassic Communities Association, as well as Koziegłowy, which additionally shares with: szlaki-konne.com.pl. Przyrów, however, indicates the platform of e-cultural services (peuk.fiiz.pl), which allows the user to plan his trip by moving around the map, providing the time and needs (accommodation, gastronomy, type of tourism, activity, interests). Communes Niegowa and Poraj do not link to tourist services at all. Similarly Żarki with its rich website addressed to tourists does not redirect to such websites on their website. The network of links is significantly extended by the commune of Olsztyn, because in addition to linking to jura.info.pl it also redirected to: silesia-sot.pl (Silesian Tourist Organization), agrojura.pl (Jura Touristic Service), jurajska.org.pl (Jura Touristic Organization). Thus, a tourist has more opportunities to collect information and verify Internet content within his touristic interests.

On the websites devoted to the analyzed communes, the most frequently described tourist attractions are: the Church of the Assumption of the Blessed Virgin Mary with the Monastery of the Regular Lateran Canons, the ruins of the castle and the wooden granary in Olsztyn, the ruins of a castle from the 14th century in Mirów, fourteenth century ruins of the watchtower of the castle in Ostrężnik, the Raczyński's palace in Żłoty Potok and several caves.

In the process of consumption of cultural goods, tourists use the infrastructure of accommodation and catering services. When promoting local entrepreneurs, communes' offices place their offers on their websites. It is characteristic that all municipalities present entities offering accommodation, although sometimes in a very limited number (e.g. Przyrów commune - 2 offers). Catering services are not presented on the websites of the communes of Mstów, Niegowa and Przyrów.

Taking into consideration the content of Flickr, Wikimedia Commons and Fotopolska related to the discussed subregion, photographs of certain several objects were most often included in them. On all three websites, at least ten photographs of castles located in Olsztyn, Mirów and Bobolice, the Raczyński palace in Żłoty Potok and the Krasinski manor house, the monastery and the church of St. Anna in Aleksandrówka, the Jewish cemetery in Żarki and the Sanctuary of Our Lady of Leśna, the Patroness of Families in Żarki. In terms of both the number of photos and the number of tourist attractions placed on the OpenStreetMap, the communes of Janów, Niegowa and Olsztyn stand out from the other communes. Detailed data on the number of photographed objects and events, as well as the number of photos placed on individual websites are provided in Table 1. Although there are many sacred objects in researched communes (out of 395 analyzed objects and events 130 were sacred ones), castles and palaces have greater tourist potential than monasteries and churches. Perhaps it is associated with greater freedom of behavior outside sacral places

including taking their photographs. Only on the Flickr website some photos taken during the pilgrimage in this area were found.

Table 1. Number of photographed objects and events on online photo websites and on the OpenStreetMap website in the area of selected communes of the Northern part of the Kraków-Częstochowa Upland

Commune	Number of photographed objects and cultural wvents (number of placed photo put in the brackets)			The number of objects marked on the OpenStreetMap website
	Wikimedia Commons	Flickr	Fotopolska	
Janów	28 (425)	13 (238)	18 (139)	58
Koziegłowy	12 (40)	6 (24)	18 (74)	21
Lelów	24 (251)	6 (160)	18 (78)	17
Mstów	10 (100)	7 (62)	7 (50)	23
Niegowa	12 (588)	11 (643)	8 (292)	53
Olsztyn	19 (476)	13 (872)	10 (236)	45
Poraj	10 (39)	8 (50)	4 (16)	19
Przyrów	7 (58)	3 (19)	4 (64)	13
Żarki	17 (384)	17 (160)	21 (311)	27

Source: Own work

These photo websites differed in terms of the photographs they contain. The Fotopolska portal did not include natural objects, unless they had cultural values, but a large number of photographs of private residential buildings were posted. In Flickr, a significant part of the photographs had the character of personal albums, and a large part of them were photos of family climbing on the Jura's rocks. In both of these sites, there were also errors with assigning photographed objects to a given area. In the case of photos uploaded on free licenses (in this case Creative Commons Attribution and Creative Commons Attribution-Share Alike), some of the photos were copied from the Flickr website to the Wikimedia Commons, as well as bilaterally between the Wikimedia Commons and Fotopolska websites

It was noticed that in the analyzed tourist subregion there are several points with a very high saturation of objects that are often photographed by Internet users. These are the communes of Olsztyn and Żarki, as well as the area of Janów and Złoty Potok, and the area of Mirów and Bobolice in the Niegowa commune. It can be assumed that some objects, being clear attractions, also affect their neighborhood, whereby objects located in their vicinity are also becoming more and more important for prosumer photographers. Communes which do not or cannot promote tourism objects symbolizing them can be overlooked by tourists who are interested in sightseeing.



Figure 1. *Localisation of the objects most often photographed by the users of prosumer websites*

Big dark stars indicate the most photographed objects on all websites (minimum 10 photos in a given website), small dark ones - very often photographed (at least 50 photographs), but not all three of them, large gray ones - relatively often photographed in all websites (at least 10 photos in each service), small gray ones - having at least one photograph in each of the three websites.

Source: Own work based on the file uploaded by Aotearoa to the Wikimedia Commons, cc-by 3.0

The authors used Internet tools which allow to research what is the amount of referrals to the commune's Internet domain, the amount of backlinks and the traffic concerning a given domain, including direct, organic and social media traffic. This information shows what is the most popular content which is referred to and what kind of Internet subjects are linked with the commune with the backlinks and referrals (e.g. semrush.com; similarweb.com). A backlink is a link on another website that points to your site. Referrals are entries to a given website from other sites and includes cases where the user clicked on a link to a given website placed on another page. Referring domain is understood as the domain which backlinks are coming from, whereas traffic means visits to a given website from different sources. One can classify traffic on the basis of the traffic sources. Direct traffic are direct entries to the website including cases when users have entered the website address in the browser or when the referrer/source is unknown. Organic Search means entries from not paid search results. This category includes transfers to a given website from the search results pages of different search engines eg. Google. Social traffic means entering the website from Social Media platforms such as: Facebook, Twitter, Google+ etc.

According to the data from the day 13 March 2018, the biggest number of total backlinks (referrals) number had Mstów commune (3800), the lowest one had commune Poraj (177). All the data are presented in the Table 2.

Table 2. Number of referrals to the communes' Internet domains and backlinks to communes' websites

Commune	Commune's website	Total backlinks number	Number of referring domains
Koziegłowy	www.kozieglowy.pl	469	61
Lelów	www.lelow.pl	1500	93
Janów	www.janow.pl	843	77
Niegowa	www.niegowa.pl	578	109
Przyrów	www.przyrow.pl	1100	33
Żarki	www.umigzarki.pl	755	67
Mstów	www.mstow.pl	3800	30
Olsztyn	www.olsztyn-jurajski.pl	1400	61
Poraj	www.ugporaj.pl/index.php	177	1

Source own study based on: <http://semrush.com>, on 13 March 2018

Qualitative analysis of backlinks provided the knowledge about the content of commune's websites that was linked by other subjects and their websites (backlinks). Backlinks to commune Żarki concerned the pope John Paul II as an honorary citizen of Żarki, tourism in Żarki, catalogue of electronic Żarki office, representatives of the subregion in the Częstochowa town hall, library in Żarki. Backlinks to commune Przyrów concerned the representatives of the subregion in the Częstochowa town hall, documents regarding the water supply tender and "Silesian district – positive energy" website content. Backlinks to commune Poraj included the poll about assessment of junior high school in Żarki Letnisko, educational issues, local anniversary of the Warsaw rising celebration. In turn backlinks to commune Olsztyn concerned Motorcycle Starry Summit to Czestochowa, Olsztyn Guardian Angel figure, Polish communes' coat of arms, local products. Backlinks connected with Niegowa website included electronic Niegowa office, Bike Atelier MTB Maraton, the representatives of the subregion in the Częstochowa town hall, Low-emission Economy Plan. The commune Mstów backlinks concerned Włókniarz Częstochowa sports club, school in Małusy and the representatives of the subregion in the Częstochowa town hall. In case of Lelów commune, backlinks concerned Lelów Historical and Cultural Society and Lelów parish. Backlinks to commune Koziegłowy included the representatives of the subregion in the Częstochowa town hall, Koziegłowy touristic objects (restaurant, hotel etc.) and "Silesian district – positive energy" website content. Finally, backlinks to commune Janów concerned Fair play commune contest, main page of the commune website, school youth hostel in Siedlec, touristic attractions of Janów and Twardowski's gate. (<http://semrush.com>).

In case of direct traffic concerning communes' websites, the biggest one concerns commune Lelów (53%), Janów (47%) and Mstów (43%). Organic traffic has the highest level in case of Koziegłowy commune (85%), Niegowa commune (75%), Poraj (72%). The level of presence of communes' websites in the social media is low (11% for Poraj, 6% for Mstów, 3% for Koziegłowy, 1% for Janów) or none (0% of social traffic for Lelów, Niegowa, Przyrów, Żarki and Olsztyn). The results of the traffic analysis show that the linking to websites of the communes not so often and not in case of every commune concern content connected with tourism or cultural resources of communes.

Backlinking analysis of communes' websites suggests that tourism issues and cultural resources of communes are not so often backlinked to websites of the communes. Backlinks concern usually other issues and events. What is more, the connections of communes' websites with the social media are very low, only some of the communes websites' social traffic was coming from Facebook website. Hence, there is a space for promotion of own touristic and cultural values and raising the awareness of entities with which the communes cooperate and maintain contacts. There is a potential for building social capital and expanding social networks of the region with the use of mentioned resources.

Even if it is not always an intentional action, cultural objects related to tourism are presented on commune websites as consumer goods. As the authors have not yet conducted surveys with tourists, residents and local authorities regarding this problem, the issues of making conscious promotional activities require further research. The authors intend to expand research in this area.

Conclusions

Therefore, in the space of the network of the analyzed pages, first and foremost, historical objects are promoted. It seems quite surprising, considering the fact that the studied area is intensively explored by pilgrims and people practicing active tourism (climbers, cavers). Historic defense and residential buildings are also significant attractions for prosuming tourists photographers. Moreover, not all tourist websites, like in the case of indicated communes, have a database of entities offering catering services, so there is some undeveloped space for cooperation in this dimension. The content of the websites related to the discussed region depends not so much on its cultural or natural specificity as on the general trends shaped in the analyzed websites. Thus, many local advantages and qualities are underestimated and not exploited in attracting tourists to the region. There is a great potential to develop the promotion of cultural goods related to tourism on the Internet in most of the researched Jura communes.

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REASONABLE OR IMPULSIVE? CONSUMPTION BEHAVIOURS OF POLISH STUDENTS – A SOCIOLOGICAL ANALYSIS

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Abstract: Over the past two decades, consumption behaviours of a society have become a significant issue addressed in numerous scientific studies and reflections. Analysing consumers' activities paves the way for determining their attitude towards purchasing goods and services, as well as reflects the state of the economy and the level of economic awareness within a given society. Young people, who have just joined the group of consumers, constitute a challenge not only for producers and service providers, but also for creators of advertisements and promotional campaigns. Their consumer attitudes developed in early adulthood, in the majority of cases, will be copied in the future and passed to the next generations, hence the importance of deliberations on the consumption behaviours of the young generation. The objective of this article is to present the results of the survey carried out in 2015 amongst Polish students, concerning their consumption behaviours. The analysis of the material collected became the basis for delineating certain trends in the consumer activities of the young generation.

Key words: consumption, consumptionism, young generation, consumption behaviours

Introduction

“We live in a consumer society. We all know, more or less, what it means to be “a consumer”. Consumers are individuals who consume, and consumption entails making use of various objects, through consuming them, wearing them or playing with them, as well as otherwise satisfying consumers' needs and desires This is what it means to be a consumer. What do we mean, however, when we speak about a consumer society? Is there anything particular in being a consumer in a consumer society?” (Bauman 2006, pp. 53-54). Being a consumer is inherent in the daily roles of contemporary people, and consumption represents one of their most important activities. The analysis of consumption behaviours is an essential element of assessing the level of a given society's economic awareness, which significantly translates into the economic development of the country involved. Consumption, as a key element of people's daily lives, is the subject of numerous studies. They are carried out by economists – who are primarily interested in the size and influence of consumption on the economy, by psychologists – who analyse personal circumstances of consumption, as well as by anthropologists and sociologists – who concentrate on consumption and its role in the functioning of societies. “As a result of the growing awareness of the importance of consumption, it starts to be treated as a significant variable that clarifies the present times. In extreme cases, this term assumes the proportions of a meta-concept used for overall clarification of the postmodern socio-cultural reality.” (Romaniszyn 2004, p. 151). The analysis is all the more important that it affects both the personal situation of an individual and the functioning of the entire society. The nature and level of consumption represents an important determinant of a given

country's economic situation, which translates into the quality of life of its citizens. Attention is also paid to the creation of a specific awareness of consumers, who often act randomly and intuitively, which is also reflected in their day-to-day existence. Currently, we are dealing with a society faced with a problem of not whether to consume, but how to consume. This is because today's consumption does not merely aim to satisfy people's needs but it also represents a specific form of celebration and determines the place of an individual within a social structure (Bauman 2000, pp. 95-96).

Recently, a great deal of attention has been dedicated to the phenomenon of excessive consumption, or the so-called hyperconsumption, which represents a serious problem in the functioning of highly developed societies. It is treated – and rightly so, as evidenced by study results – as a problem of the new generation, a problem arising from both the attitude towards consumption itself and the forms of this consumption. “One of the driving forces behind social development is hyperconsumption. It is the attribute of the present times, penetrates people's daily lives and becomes the sense of their living. People build their identities upon consumer goods. Group identity is also built around consumption.” (Bylok 2016, p. 63). Excessive consumption constitutes a kind of a spiral which drives further needs that “must” be satisfied, and consumers lose the possibility to choose between actual needs and marginal or apparent needs (Szczepański 1981, pp. 138-146). We experience an excessive multiplication of needs which – in the consumers' opinions – are required to fulfil and achieve a specific state of well-being. “The growing wealth and increasing levels of consumption generate new needs which, over time, by acquiring different cultural, social and moral contexts, are imperceptibly shifted to the realm of basic needs. In this context, one can speak about the syndrome of a permanently insatiable consumer, who is constantly searching for new consumer goods and experiences.” (Mróz 2009, p. 17). The constant quest for goods and services which are supposed to satisfy further needs turns consumption into one of the most important human activities.

In the course of socialisation, young people acquire and modify consumer patterns that they will pursue during their adult lives. The impact of the educational environment, the surroundings and social patterns is not insignificant in this case. Additionally, an important role in this regard seems to be played by the psychopersonal characteristics which may determine the nature of a given individual's consumer decisions. “The most important issues in the studies concerning consumption behaviours seem to be the observation and analysis of the processes that people take into consideration while making their purchasing decisions. The market behaviour of clients is determined by both their past experiences and future predictions, as well as by a random supply of incentives. Its essential element is the decision-making process The manner in which consumers make their choices depends not only on their personal traits, but also on such factors as the significance of a given decision, the complexity of the task concerned and the pressure of time.” (Kuś 2011, pp. 11-12). Consumers may be guided by different motivations while making their purchasing decisions, including the financial resources they possess, the price, the time, the assortment, their experiences and social status, or even the weather (e.g.

a spontaneous purchase of an umbrella during an unexpected downpour). „Consumer’s behavior determined by their perception abilities and susceptibility to persuasion may also depend on seemingly unimportant details.” (Makarewicz 2013, p. 104). Consumption activities and consumption behaviours may therefore be dependent on a number of factors, on both a macroscale (e.g. the condition of a state’s economy) and a microscale (a consumer’s personal traits), which comprises the entire decision-making process (Włodarczyk 2013, p. 5). Consumption behaviours – according to Józefa Kramer – can be divided into behaviours determined by the following factors (Kramer 1995, pp. 16-17:

- Economic and non-economic;
- External and internal;
- Objective and subjective (objective factors include demographic, social, and professional factors, internal economic factors – the level of incomes, the status of possessions, etc., external economic factors and non-economic factors – the level of prices, the information system on the market, etc.);
- Direct and indirect;
- Others, measurable and non-measurable).

The nature of consumption behaviours is determined by the type of purchasing decisions which are primarily represented by consumers. And those might include the following:

1. Prudent decisions – “a prudent consumer” – purchases are made following a decision-making process, e.g. after a thorough analysis of the relevance of a given need and obtaining exhaustive information on the goods or services in question, as well as after comparing all the relevant offers at hand. „Price greatly influences consumers’ purchasing decisions. Individuals whose decisions are primarily driven by price are said to be «price conscious».” (Rihn, Khachatryan, Wei 2018, p. 1).
2. Habitual decisions – “a traditionalist consumer” – are decisions which concern the purchase of products or services used by the consumer on a daily basis. The decision-making process in this case may be shortened by the time necessary to assess the alternatives, because such an assessment has already been made by the consumer before (Garbarski 1998, pp. 82-83). „Consumers sometimes act like creatures of habit, automatically repeating past behavior with little regard to current goals and valued outcomes. To explain this phenomenon, we show that habits are a specific form of automaticity in which responses are directly cued by the contexts (e.g., locations, preceding actions) that consistently covaried with past performance. Habits are prepotent responses that are quick to activate in memory over alternatives and that have a slow-to-modify memory trace.” (Wood, Neal, 2009, p. 579).
3. Impulsive decisions – “an impulsive consumer” – as the name suggests, this type of decisions are made on the spur of the moment, when consumers “... do not plan most of their purchases, often indulge in mindless shopping, pay no greater attention to how much they spend, and usually do not search for cheaper options.” (Mącik, Mącik 2015, p. 140). In this case, there is no room and time for

a complete decision making process – the consumers act without much consideration, and the products and services purchased impulsively are usually characterised by low prices, mass distribution, self-service, intensive advertising, good exposure in a shop, small quantities, and easy storage (Dąbrowska, Bylok, Janoś-Kresło, Kielczewski, Ozimek 2015, p. 76).

Consumption behaviours of Polish students – an analysis of study results

The study results which will be presented below are part of a larger research project fulfilled within the framework of the Visegrad Standard Grant entitled: “The economic awareness of the young generation of Visegrad countries” No. 21420008. It was attended by the partners of four universities, namely the University of Silesia in Katowice, the Palacký University in Olomou, the University of Constantine the Philosopher in Nitra, and the Szent Istvan University in Gódólló. Additionally, the studies were also carried out by female employees of the Sociology Department at the University of Ostrava. The tool used for obtaining the information was a survey questionnaire distributed amongst 400 students of three Silesian universities, including the University of Silesia, the University of Economics in Katowice, and the Silesian University of Technology. Since consumption and consumer attitudes represent a vital element of economic awareness, some of the questions in the questionnaire concerned these issues, and their analysis constitutes the subject of the present paper.

The nature of consumption behaviours can be analysed by means of many indicators. One of them is undeniably the survey of consumers’ activity during their daily shopping. Therefore, the students surveyed were requested to characterise their daily purchasing decisions.

Table 1. The manner of doing the daily shopping (%) N=400

Statements	% N=400
I buy only what I need, trying to save money	25,0
I usually buy products that I've known for a long time	19,8
I usually check prices in different stores and try to buy as cheaply as possible	16,4
Before I buy anything, just check if I can afford it	16,1
While shopping I usually put everything I need into the cart	7,4
Shopping is a chore for me, I do it only when I have to	6,4
I do not usually have time to compare prices at different stores and buy something right away	6,3
I buy the best, regardless of price	2,0
Other possibilities	0,6
Total	100,0

Source: Own studies and calculations

The results of the study demonstrate that we are primarily dealing with students who are rational consumers and whose purchasing decisions are mainly guided by cost-effectiveness, which is supposed to yield a positive balance of the price-to-quality ratio. One fourth of the students admitted that they buy only the things they really need, trying to manage their funds reasonably. "Incomes and prices have a fundamental impact on the behaviour of consumers. A significant role is also played by the durable goods possessed, the savings accumulated and the possibility to take advantage of a consumer credit." (Woś, Rachocka, Kasperek-Hoppe 2011, p. 54). The influence of the material situation is also of no small importance for the purchasing decisions made, because it limits consumers' activities up to the amount of their financial resources or forces them to make use of alternative forms of financing (credits/loans). In the case of the young generation, such alternative forms of financing may also include the funds provided by their family members (parents, grandparents, etc.). This is also justified by the fact that the students, in most cases, are not yet creditworthy, which also affects their purchasing decisions. In their rational attitudes, they try to do their shopping in places which, in their opinion, offer the most attractive prices. This choice is preceded by analysing and comparing the prices for the basket of goods and services. Based on the material collected, it can be concluded that we are also dealing with a considerable percentage of traditionalist consumers, who choose the products and services they have been familiar with for many years. It is all the more interesting that routine decisions are commonly associated with the elderly, who choose the products and brands which they have known for a long time and which – in their opinion – fulfil all the necessary functions. Today, however, it is even amongst the senior consumers that one can discern an emphasis on individualisation in terms of the fulfilment of their needs (Zalega 2016, pp. 411-412). In many cases, young people copy the patterns which were a common practice in their family homes. However, they add their own experiences which – over time – become habitual in nature. A small percentage of the respondents represent impulsive attitudes, i.e. they put everything they think they need into their shopping carts. Here, there is no place for analysing and comparing prices or offers – the action is spontaneous and devoid of any features of economic calculation. Only 2% of those surveyed admitted that they attach no importance to the price, but rather to the quality of the product in question and it is the quality that determines their consumer choices. The students – unexpectedly perhaps – also declare that they find shopping an unpleasant duty and limit their purchases only to products that are absolutely necessary in a given moment. The above data demonstrate that, even though the students declare frugal management of their money, they do not treat it in an orthodox manner. Above all, they associate frugality with rationality, which results from purchasing products at favourable prices and making calculations to determine the profit (the most favourable price) and loss (the time spent). They do not regard consumption as a duty which evokes unpleasant emotions and are rather inclined to choose products they know and which are pleasant for them to use.

The style of consumption is also defined by the attitude towards shopping in the case of limited funds or even a lack of funds – whether the desire to purchase the goods or services is a compulsion, or an effect of a conscious and voluntary decision.

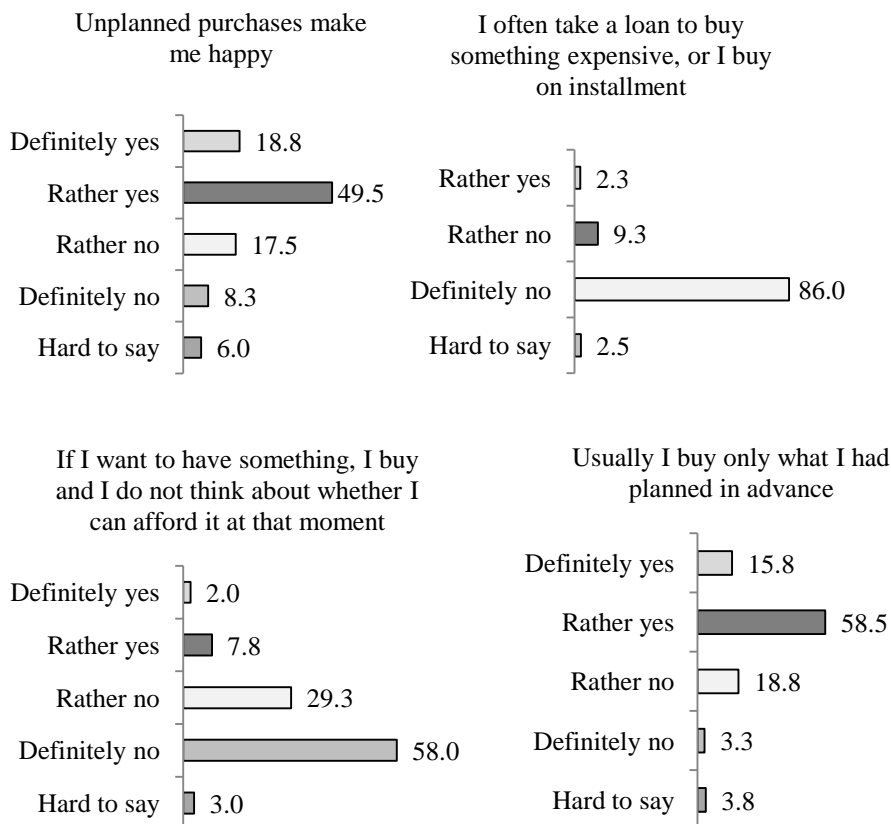


Figure 1. Attitude to shopping

The analysis of the material collected indicates that the students are far from buying things that exceed their financial capacity, even though they acknowledge that unplanned purchases make them happy. This happiness is a completely natural phenomenon – it essentially results from the fact that such shopping experiences are a kind of surprise or a whim that can rarely be indulged. It may be assumed that unplanned purchases are associated with the receipt of additional funds that can be disposed of in this way (e.g. extra pocket money, birthday presents, etc.). Above all, however, the students plan their shopping, which is reflected in the calculations they make beforehand. Therefore, in this case, we are dealing with rational consumers, who – on the other hand – also enjoy purchases which have not been planned before. The thinking process they get involved in before making a purchase is due to the fact that they definitely avoid situations in which they would have to take out a loan to satisfy their impulsive shopping needs.

The study results presented in this article may be surprising, especially as the young generation are quite often perceived as individuals for whom frugality and rationality in action are pushed to the background. Such a state of affairs may be affected by the primary socialisation which takes place in their family homes and manifests itself through copying the consumption behaviours of their parents. We might also be dealing with the influence of education and the transfer of economic knowledge, which – to a great extent – determines the level of economic awareness. “... in the case of rationalising purchasing decisions, an important role for the impact of framing effects is played by not only the economic but also the social capital, understood as the social surroundings characterised by a specific level of incomes or education, and thus generating pressure on specific behavioural patterns” (Fryzer 2014, p. 90). These patterns often remain beyond the awareness of the young generation, exerting influence that may be important for their future and the socio-economic situation. Attention is also paid to the place of consumption in the life of the young generation.

Summary

Answering the question posed in the title of the article, it may be clearly stated that the students are rational consumers. In the vast majority of cases, the study group make their purchasing decisions after careful consideration. Impulsive shopping – if it does happen – constitutes an exception to the generally accepted rule and tends to be the source of happiness for the young generation. A more important aspect for them, however, is not to lose their financial liquidity as a result of reckless and ill-considered consumer decisions. Such an attitude demonstrates a relatively high level of consumer maturity and a high level of economic awareness. These studies represent a certain preface to further in-depth analyses, which will be undertaken by the Author in the future. It is positive, however, that the students surveyed – despite their young age – are aware of their situation and the possibilities it creates in terms of consumption. Rational consumers are consumers who are aware of their limitations and hence less susceptible to the syndrome of hyperconsumption.

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II. SUSTAINABILITY IN MANAGEMENT

INDIRECT CONTRIBUTION OF POLISH TECHNICAL UNIVERSITIES TO SUSTAINABLE DEVELOPMENT GOALS

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Abstract: The main subject of this paper is an indirect participation of Polish universities with technical profile in the process of implementing the concept of sustainable development. This indirect participation consists in providing adequately trained staff, which education belongs to the statutory responsibilities of each university. Universities perfectly understand the need for training of personnel capable of facing new civilization challenges, which undoubtedly is one of the most important tasks in the process of creating a sustainable development. Technical universities pay special attention to the skills and competences of future industrial workforce – which is a relevant topic of this paper. Some examples of the universities which gradually and consistently adjust their study program to the occurring changes are Warsaw University of Technology, Silesian University of Technology, Wrocław University of Science and Technology, AGH University of Science and Technology, Gdańsk University of Technology, Łódź University of Technology, Częstochowa University of Technology and Poznań University of Technology. This choice is determined by the leading position of these universities among other Polish technical schools. The short review of their course offer allows to claim that these universities take issues associated with the latest trends in research and the subjects of lectures, exercises, laboratories as well as graduation theses support this view.

Key words: sustainable development, university of technology, study program, engineering staff, competences of industrial workforce

Introduction

Sustainable social and economic development is one of the most important challenges of the modern world. The concept was well defined in 1987 in the report of the World Commission on Environment and Development, established four years before by the UN and led by a Norwegian politician Gro Harlem Brundtland. The report defined sustainable development as development in which the needs of the present generation may be met without depriving future generations of the possibility to meet their needs. The development also covers environmental, economic and social aspects (Our Common 1987). The concept, so different from the purely economic approach to sustainable economic growth, has met global approval in a short time. In Poland, the condition of sustainable development was included in Art. 5 of the Constitution of the Republic of Poland of 2 April 1997 as one of the most important rules legally binding and realized by the state. The Act of 27 April 2001, Law on Environmental Protection, includes a provision similar to the one in the Brundtland Commission report, which defines sustainable development as “such social and economic development that entails the process of integrating political, economic and

social undertakings, at the same time maintaining the natural balance and continuity of basic natural phenomena, in order to safeguard the possibility to meet basic needs of certain communities or citizens, both of the present generation and future generations” (Dziennik 2001).

The conditions of sustainable development are based on a number of underlying facts, two of which are important to be mentioned here (Our Common 1987):

- Competition on the market has forced considerable scientific and technical progress, reflected in greater efficiency of the use of work force and resources, also of energy and its resources. This has brought about a positive effect for the environment by smaller consumption of natural resources and limiting pollution emissions per production unit.
- Without the awareness of environmental and health hazards, technical progress had to, however, lead to an increase in these hazards. This happened due to introduction of new chemical substances, non-degradable in a natural way, hazardous for human health and the natural environment, due to introduction of new, genetically modified organisms, and due to rapid infrastructure and housing development, not coordinated with the environment.

Both factors mentioned above contain a clear reference to scientific and technical progress, which, especially in the last two decades, has practically revolutionized people’s lives in the whole world. There has also been a change in the perception of sustainable development in view of possibilities offered by new technologies and widely understood innovativeness, which has led to a new concept – intelligent development.

In the shortest possible way, intelligent development may be defined as development of economy based on knowledge and innovations. New intelligent solutions with the use of cutting-edge technologies which enable stable development and give a solid background of human existence are undoubtedly a derivative of sustainable development. Such activities include, i.a., the process of city development, civil engineering and transport. Thus, it touches various fields and it is often analysed from various perspectives, e.g., national, regional or local perspectives (Bach 2014, p. 20). The importance of the problem is proved by including intelligent development as a key element of the strategy Europe 2020. In Poland, on 8 January 2014, the Council of Ministers adopted the document ”Operational Programme Intelligent Development 2014-2020”, which is a Polish implementation of the European Union cohesion policy in the field of increasing innovation and research. The programme concentrates on undertakings connected with development of knowledge-based economy, competitiveness of the science sector and effective business-related institutions, which facilitate intelligent economic development of the country. Three of its four main aims are directly related to research units (Program 2014):

- support for businesses in the field of innovation and research,
- increasing the quality of research and development work,
- increasing internationalization of research and development work.

Undoubtedly, the contribution of the higher education sector to achievement of these aims is of vital importance. It is the universities that prepare future generations

of professionals and political and social leaders who will make it possible to implement the rules of sustainable development in all areas of functioning of societies and individuals. These issues and other general problems of sustainable education are discussed in, inter alia, papers written by (Adomssent 2006, Guli 2006 and Jones at al. 2010).

Promotion of the concept that sustainable development should be reflected in the functioning and research activities of universities was initiated in 1993 at the Conference of European Rectors. The end result of their sessions was the document Copernicus Charta signed by 326 universities. The signatories took up the obligation to introduce, in 1993-2005, the concept of sustainable development at their universities, which would cover education of students and start promotion of knowledge on the issue among the rest of the society. At the beginning, the dominating role of universities in promotion of the idea seemed indisputable. This was proved by the new version of the Copernicus Charta 2 published in 2011, as well as a treaty on higher education Rio +20, approved at the UN conference in Rio de Janeiro, which included information on the trends of transformation of fields of study at universities taking into account academic disciplines (Kalinowska, Batorczak 2017).

The situation changed when sustainable development started to cover wider and wider aspects of social life. In the era of complex civilisation changes, concentration of value systems, ecology or human capital management became insufficient. It was necessary to initiate implementation of modern technologies and a number of innovations. Access to them was, however, determined by the participation of technical universities with research potential and achievements of academic staff. Without using these possibilities for social progress, the concept of sustainable development could not be popularised on the global scale. The trend towards interdisciplinary education within the discussed concept was confirmed by, i.a., starting the international Programme of Global Actions for Education for Sustainable Development and adoption, in 2015, of seventeen Sustainable Development Goals, which set the roles and tasks of higher education (also technical education) in supporting various initiatives directly connected with them. Especially important in this field was providing a teaching offer relevant to the challenges, and also education of future staff which could continue the tasks in the future (Dacko, Płonka, Prus 2018). It may be even stated that universities, as the main actors of civilization progress, must complete a kind of mission of participation in the process of sustainable and intelligent development (Kalinowska, Batorczak 2017). This is especially true in the case of Polish technical universities, whose range of research covers practically all areas of technology, and the search and implementation of innovative technologies are their priorities.

Analysis of direct participation of technical universities in the Operational Programme Intelligent Development 2014-2020 is not the subject of this paper, however. The main subject, presented in the further part, is indirect contribution of technical universities to achievement of sustainable and intelligent development goals. This indirect contribution means education of well-prepared employees, which is

a statutory task of each university. It is important to remember here that academic staff are willing to participate in innovative projects connected with operational programmes and they are quick and flexible to adapt their research potential to occurring needs. On the other hand, the process of launching new fields of study and introducing relevant changes in study programmes takes place quite slowly and often does not follow the needs of the job market. This is caused by frequently arduous formal procedures, but generally by financial constraints, which make it impossible to often change workshop and laboratory equipment. Nevertheless, universities are well aware of the need to educate staff able to face new civilisation challenges and by taking up this task, they indirectly participate in working towards sustainable and intelligent development goals.

There are examples of universities which gradually and consistently adapt their study programmes to occurring changes. These include: Warsaw University of Technology, AGH University of Science and Technology, Wrocław University of Science and Technology, Silesian University of Technology, Gdansk University of Technology, Lodz University of Technology, Czestochowa University of Technology and Poznan University of Technology. Most attention is paid to here to the Warsaw University of Technology due to its leading position and the widest and most direct access of the author to the WUT education offer. The choice of the other 7 universities was determined by their high position in latest Polish university rankings and specificity of education related to regional industry.

In the further part of the paper, selected elements of the didactic offer of these units will be discussed. The conducted analysis of degree programmes of Polish technical universities in the context of sustainable development is preceded by a historical reflection. It should be remembered that it was already in the 19th century when the role of the established technical schools was defined. Undoubtedly, education of well qualified engineering staff was the condition of the development of Poland after regaining independence in 1918, as well as after the end of the Second World War. Polish technical universities took up and perfectly completed the challenge of providing technical education.

Historical background

In the first half of the 18th century in many parts of Western Europe, there was significant expansion and concentration of factories, often referred to as "proto-industrialization". More and more frequently, mechanical engines and new energy sources were used, and technical inventions accelerated the industrialization process, called the industrial revolution. The changes were the fastest and the most reaching in England but already at the end of the 18th century, innovations covered most European countries. There was a kind of a feedback loop – scientific progress allowed modernization of production, and this, in turn, stimulated the search for new technical solutions. Industrial revolution also meant not only rapid industrialization, but it also resulted in greater efficiency of agriculture and development of transport infrastructure. The revolution led to deep social changes, there was also great and

constantly growing demand for workers of higher and higher level of technical knowledge. Skills of “amateur professionals”, who at the beginning were the majority of machinery operating staff, became insufficient. Existing secondary schools and universities basically did not offer any education directly connected with technology, which was not regarded as an area of science. Although military schools were of engineering character, only a small fraction of their graduates took up work for civilian purposes. In addition, these were most often schools of one profile only, connected with military engineering. In the face of growing needs, schools were established in Europe in mid-18th century, aimed at teaching civilians in the field of technology. The first multi-disciplinary technical university, École Polytechnique, was set up in Paris in 1794. In 1807, the Prague University of Technology was established and in 1815 – the Polytechnic Institute in Vienna (Ruegg 2004, pp. 597-600).

Further industrialisation on Polish lands delayed (in relation to Western European countries) the occurrence of the problem of lack of technical staff and education in this field. However, already at the beginning of the 19th century, lack of technical schools was clearly visible. Loss of sovereignty limited the possibility of setting up such units; especially establishment of technical universities depended solely on the occupying governments. The policy of the partitioning powers was greatly varied in this respect. In Prussia, any initiative was strongly opposed by subsequent emperors. Therefore, no Polish technical university was ever created on Polish lands under Prussian occupation. The situation was much better in the Kingdom of Poland and in Galicia, where in the first half of the 19th century, foundations were created for future technical universities, such as Warsaw University of Technology, Lvov University of Technology and the Mining Academy in Cracow.

The first polytechnic unit was the Warsaw Preparatory School for the Polytechnic Institute. Establishment of the School was initiated by Stanisław Staszic, who strove not only to industrialize the Kingdom, but also promoted the idea of organization of technical education. He was member of the State Council and vice minister of the Committee for Religious Beliefs and Public Enlightenment so he was aware of the urgent need for education in applied sciences. Staszic was a visionary and he understood well the significance of engineering staff, necessary to meet the needs of developing industry on Polish lands. In this, he saw the chance for civilization progress of the society under occupation; he could be seen as a forefather of the concept of sustainable, intelligent and inclusive development. He often addressed the issue in his speeches during the sessions of the State Council and in public speeches. On the 5th of January 1826 in the Kazimierzowski Palace, there was the celebration of opening of the Preparatory School for the Polytechnic Institute. Stanisław Staszic gave the opening speech, in which he emphasized the importance of applied sciences and encouraged young people to acquire practical knowledge, very useful for development of the country and for meeting the needs of citizens. Staszic addressed teachers with an unconventional message:

"A scientist who is just a theoretician may be a lazy person, just a burden for the society. But the scientist who contributes to increasing state welfare, to development

of national industry, will be a useful citizen, will participate in the great idea of socializing people, of the common good." (Staszic 1956, p. 262).

The speech also included his concept of a technical university:

"The Polytechnic Institute concentrates all already discovered and those yet to be discovered means with which mathematical and physical skills help develop national industries. It is a great museum of inventions of all enlightened nations, models, formulae, tools, machines, ready to use... Graduates of this Institute will spread practical teaching to the industry and factories all over the country."

Speaking at the celebration, Stanisław Staszic also said: "To be useful for the society, one should strive, be able to apply the acquired knowledge and skills for national needs, to inventions, for public use." (Staszic 1956, p. 263).

This was the message for curricula creators and teachers over the whole period of the School activity, which, although formally had the status of a secondary school, very quickly achieved the level of education comparable with leading European universities. The course offer of the Polytechnic School was even wider than the offer of the Vienna Institute. At three technical faculties (Faculty of Chemistry, of Mechanics and of Civil Engineering), the staff of 16 professors ran 23 subjects in courses for so-called higher technicians (an equivalent of engineering degree programmes) in 1829. At the same time, at the Vienna Polytechnic Institute, 7 professors ran 17 lectures in two technical divisions. Due to financial and infrastructure constraints, the School could not organize its own mechanical workshops, even though gradually changed curricula introduced such courses. Aware of the necessity to acquire practical skills, the Treasury Committee and the Committee for the Interior and the Police, allowed professors and students to access important national industrial plants. This was unique on the European scale – real collaboration of university and industry.

Unfortunately, the outbreak of the November Uprising interrupted the functioning of the School. Only in 1898 was the Polytechnic Institute of the Tsar Nicolas II established in the Kingdom of Poland, with Russian as the language of instruction, transformed in 1915 into the Polish-language Warsaw University of Technology. Earlier, in 1844, in Lvov, a technical academy was established, transformed into the Polytechnic School and then into Lvov University of Technology. Both universities, along with the Mining Academy in Cracow, established in 1919, played a key role in the process of industrialisation of Poland in the mid-war period (Jakubiak 2017).

November 1918 was the beginning of the complicated process of rebuilding Poland after 123 years of occupation. The post-Partition areas, united now into one state, were greatly varied in terms of nationalities, economics, monetary system and administration. Incompatible and generally outdated infrastructure called for a great number of specialists, necessary in particular for industry modernization and widely understood industrialization. Many well educated Polish engineers were needed but there were very few of them. Both universities of technology, in Warsaw and in Lvov, were prepared to educate technical specialists. Thanks to systematic development of laboratories, the universities could start to develop and implement achievements

which allowed to reconstruct industrial and production plants, often destroyed and in need of modernization.

One of the most important challenges of Polish technical universities in mid-war Poland was adaptation of the knowledge students were taught to the needs of the developing economy. Education of young engineers with competences to start work in companies of varied specializations was a condition of industrial progress on both regional and national scale. For this reason, academic authorities often introduced changes in existing faculties and widened their structure with new highly specialised divisions or chairs. Tendencies to take such actions were mainly visible at the Warsaw and Lvov Universities of Technology. Structural transformations at these universities were conducted at faculties that taught electrical technology, chemistry, mechanics and civil engineering. After the end of the first world war, these areas were the basis of the industry and economy of most Western European countries. Polish engineers wished to bridge the gap in industrialisation progress between Poland and other democratic countries, which was the result of the Partitions, and so they constantly had to collect information on technological innovations, prepare their own patents on this basis, and get knowledge across to students. Already in 1918-1921, the programme offer of universities started to include courses in fields regarded as modern and not yet explored in Europe, such as the telephone, the telegraph and the radio. In the 1930s, at faculties of electrical engineering, divisions of teletechnology and radiotechnology were organised, and at mechanical faculties, aviation sections were established. It should be stressed that most diploma theses were implementation projects. In this way, technical universities very efficiently completed one of their tasks, i.e., education of high class specialists who ensured modernisation and development of industry in the reborn Polish state. Polish technical universities in mid-war Poland also completed the obligation of conducting innovative research and implementation of their results. Academic teachers took up this task in a responsible way and with great engagement, thereby contributing a lot on the national scale to improvement and acceleration of industrialisation. Frequently by giving access to laboratories and technical infrastructure, and also allowing academic staff who knew cutting-edge technologies to take up “parallel” jobs in industrial plants, technical universities greatly contributed to increasing work efficiency and improving the economy of various regions in 1918-1939 (Jakubiak 2015). This upturn was interrupted by the Second World War. After the end of the war, once again Polish technical universities took up the mission of responsible contribution to rebuilding the state. The mission is still continued today and enriched with new elements, also with active contribution to sustainable development.

Elements of sustainable development in study programmes of leading Polish technical universities

As mentioned before, each technical university is “naturally” connected with technological progress, innovativeness and civilisation progress. This is obviously true for all fields of study offered by faculties. However, for several years, some of them

have been strongly engaged in the process of sustainable and intelligent development thanks to their specific study offer. This may be investigated on the basis of publicly available study programmes and course syllabi. Below, I shall present selected examples of this type of study offer of universities listed in the introduction. The methodology of the selection was based on two basic premises:

- the courses should be part of the specialisation directly related to sustainable development,
- the name of the course should have a clear content reference to intelligent and sustainable development.

Another important criterion was also adopted – the issues of intelligent and sustainable development should be the core of the contents of the course. This assumption required an analysis of lectures, tutorials and laboratory classes in degree programmes. In addition, an analysis of so-called learning outcomes included in course sheets was also conducted.

The first university to be discussed is the Warsaw University of Technology (Politechnika Warszawska) – the oldest and largest Polish technical university. Nineteen faculties and one college offer 41 fields of study in first-cycle full-time degree programmes, 43 fields of study in second-cycle full-time degree programmes, and 18 and 16 fields of study in part-time degree programmes, respectively (www.pw.edu.pl). This wide offer covers almost all disciplines in technical sciences. A few university units pay special attention to education of staff prepared to take up tasks connected with sustainable development engineering. These units include, i.a., the Faculty of Electronics and Information Technology, the Faculty of Building Services, Hydro and Environmental Engineering, the Faculty of Civil Engineering and the Faculty of Transport (www.pw.edu.pl).

Students of the Faculty of Civil Engineering may be fully specialised in sustainable civil engineering already after first-cycle (engineering) degree programmes. Obligatory courses in the specialisation Sustainable Civil Engineering are, i.a. (www.il.pw.edu.pl):

- Sustainable Building Materials,
- Building Design in Line with Sustainable Development,
- Elements of Architecture of Sustainable Development.

Each of them is conducted in the cycle of 45 hours per semester, covering a lecture, tutorials or laboratories and a project. Detailed subjects of the courses are presented in Table 1.

Analysis of the content of these lectures shows that students acquire wide and comprehensive knowledge needed to design in the field of civil engineering, taking sustainable development into account. This is also true, to a smaller or greater extent, for other courses in this specialisation, as well as in other fields of study offered by the Faculty.

Table 1. Subjects of lectures in the specialization Sustainable Civil Engineering at the Faculty of Civil Engineering of the Warsaw University of Technology

Course name	Subjects covered
Sustainable Building Materials	<p>Sustainable civil engineering – premises and materials needs.</p> <p>Basic terms, thermodynamic fundamentals of a sustainable building.</p> <p>Energy-related analysis as an element of assessment of the lifecycle of an object.</p> <p>Impact of building materials on the human and civil engineering.</p> <p>Use of industrial waste for building purposes, recycling, reuse.</p> <p>Materials usefulness; selection criteria of a sustainable material.</p> <p>Materials compatibility; material and object durability.</p> <p>Materials for repairs and construction maintenance.</p> <p>Design of composite building materials in view of energy efficiency.</p> <p>Development trends of sustainable building materials, special solutions.</p>
Building Design in Line with Sustainable Development	<p>Sustainable development of world economy.</p> <p>Definition of sustainable development.</p> <p>Dematerialisation of production and consumption (Factor 4 and Factor 10).</p> <p>Materials recycling. Limitation of recirculation of coal in nature.</p> <p>Overview of legal regulations on sustainable development in civil engineering in Poland and in the European Union.</p> <p>Methods of assessment of environmental impact of the building.</p> <p>Sustainable development indices in civil engineering. Analysis of the surrounding of a building. Transport system and media.</p> <p>Overview of technologies used in civil engineering in terms of environmental impact.</p> <p>Comparative analysis, implementation level of energy-saving and ecological materials and technological solutions in Poland.</p> <p>Design of energy-efficient buildings. Continuity of tradition and modernity. Integration of volumes of building sections and minimum cooling area. Rational energy consumption.</p> <p>Design of ecological buildings. National use of renewable energy and natural energy systems in building design. Harmony with nature, i.e., maximum use of the natural surrounding and integration of the designed building with it. Minimum hazard for human health and the surrounding.</p> <p>Guidelines of building design in line with sustainable development rules.</p> <p>Design of passive buildings.</p> <p>Building location and impact on the surrounding, possibilities to use architectural and technical solutions which allow passive heating and protection against overheating of rooms in summer.</p> <p>Minimization of heat losses by permeation through divisions: outer walls, ceilings, roof areas, windows and doors and joining areas between the mentioned building divisions (thermal insulations, products of increased thermal insulation, e.g., energy-efficient wall elements, windows, glass).</p> <p>Heating systems of a building, energy-efficient lighting.</p> <p>Ventilation and usable hot water preparation.</p> <p>Examples of energy-efficient and passive buildings in European countries.</p>

Elements of Architecture of Sustainable Development	<p>Contemporary issues of sustainable development in urban planning (spatial planning).</p> <p>Rational rules of location of buildings and building complexes on a plot of land (land management).</p> <p>Trends in shaping an architectural block and building plan in terms of energy efficiency.</p> <p>Shaping a modern architectural detail in ecological buildings. Use of energy recuperation systems and devices in architectural design.</p> <p>Spatial organisation of the interior – fixtures and facilities.</p> <p>Impact of texture and colour of the front on architectural reception.</p>
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Source: Prepared by the author on the basis of: ECTS Catalogue of the Warsaw University of Technology, academic year 2015/16

The Faculty of Building Services, Hydro and Environmental Engineering is especially destined to educate engineers who are aware of civilisation needs and constraints. Among many courses offered in the field of study Environmental Engineering, it is important to mention the content of the lecture “Civilisation Hazards and Sustainable Development”, conducted in two parts, in the 6th and 7th semesters of first-cycle degree programmes. The lecture aims at presenting hazards (pressures) to the environment due to anthropogenic (civilisation) human activity. This covers industrial progress in terms of environmental protection, starting from the beginnings of the industrial age (~1860) until the present and in the future until 2050. In view of local, regional and global hazards, greatest attention is paid to fuel combustion for energy and impact of transport on city inhabitants. Making students aware of sustainable development issues in the global, European and national scale and providing them with the ability to evaluate sustainable development are the final aims of the course (www.is.pw.edu.pl). Detailed subjects of both parts of the lecture are presented in Table 2. Also in this case we can see a complex view of the issue, and additionally, “engineering” elements have been complemented with issues in the field of economics and social policy.

The mentioned Faculty of Electronics and Information Technology of the Warsaw University of Technology has a special place among faculties involved in the issues of sustainable and intelligent development. Basically, the whole offer of the faculty aims at shaping an engineer of the “civilisation of the future”. Courses are run by outstanding specialists, who deal with, e.g., artificial intelligence, Internet of the future, the Internet of Things, nanotechnology, biomedical engineering, data mining, network security, steganography, automatic control and robotics, and multimedia technologies. Students pursue a flexible study programme, which enables access to over 500 courses run at the faculty. Diploma theses are often of interdisciplinary character; for instance, the subject “Intelligent Building” covers a number of functional elements based on various technologies and disciplines (telecommunications, IT, radiotechnology) (www.elka.pw.edu.pl). Table 3 presents the subjects and short abstracts of a few selected engineering diploma theses from the last two years, defended at the Faculty of Electronics and Information Technology at WUT.

Table 2. Subjects covered in two parts of the lecture "Civilisation Hazards and Sustainable Development" at the Faculty of Building Services, Hydro and Environmental Engineering of the Warsaw University of Technology

Course name	Subjects covered
Civilisation Hazards and Sustainable Development – part 1	<p>Systematic approach to the issues of environmental protection taking into account mutual feedback between social needs, economic and consumer activity and the environment.</p> <p>Comparison of environmental impact of selected natural and anthropogenic sources.</p> <p>Processes of fuel combustion as the main source of environmental problems on the local, regional and global scale. Scenarios of covering energy needs of the world and Poland and ensuing environmental impact: pollution emission, greenhouse effect, water consumption for technological processes and condenser cooling, production of wastewater and sludge, and energy waste, sources of noise emission and sources of electromagnetic radiation.</p> <p>Characteristics of processes of fuel combustion (professional, industrial and municipal power engineering) for determination of: pollution emissions to the air, amount and quality of water taken, waste created and landfilling, noise emission.</p> <p>Characteristics of environmental protection devices (pipe end) for the abovementioned problems with an analysis of their secondary environmental impact (desulphurization and denitrification installations, wastewater treatment plants). Characteristics of trends in limiting environmental impact through technological changes in energy generation and improving the efficiency of present technologies.</p> <p>Synthetic characteristics of other basic industrial processes (iron and steel metallurgy, non-ferrous metal metallurgy, chemical industry, cement and lime industry) and agricultural and food industry.</p> <p>Characteristics of transport environmental impact (road, railway and air) in terms of pollution emissions to the air and noise, using land for roads (impact on Natura 2000 areas).</p> <p>Characteristics of environmental impact (hazards) on municipal infrastructure objects (municipal waste incineration plants, landfills, wastewater treatment plants) in terms of sources of environmental impact. Synthetic discussion of selected results (effects) of hazards to the environment due to anthropogenic human activity: • greenhouse effect • London smog • California smog • tropospheric ozone.</p>
Civilisation Hazards and Sustainable Development – part 2	<p>Economic fundamentals of assessment of the level of sustainable development.</p> <p>Management of renewable and non-renewable resources.</p> <p>Sustainable use of Earth resources.</p> <p>Sustainable development indices.</p> <p>Sustainable development in European policy.</p> <p>State ecological policy and sustainable development in this policy.</p>

Source: Prepared by the author on the basis of: ECTS Catalogue of the Warsaw University of Technology, academic year 2015/16

Table 3. Selected titles and subjects of engineering diploma theses defended in 2014-2016 at the Faculty of Electronics and Information Technology of the Warsaw University of Technology

Diploma thesis title	Subject
Smart building – functions of numerical keypads facilitated with biometrics	The thesis concentrates on increasing the efficiency of biometric access systems in a smart building. It includes the design of a system based on integration of a numerical keypad with a biometric module, which allows to increase the functional efficiency and safety level.
Smart building with a centralized control system	The project covers the architecture of a smart building with a control system based on an integrated microprocessor module and unified access interface.
Smart building automation system with user location context	The thesis designs a system that allows to automate devices in smart buildings and around them. The system analyses the user's location and position and so makes decisions on turning on or off devices in the user's surrounding. The system also allows to fully monitor devices and users of the building.

Source: Prepared by the author on the basis of: Diploma Theses, Archive of the Warsaw University of Technology

Investigation of the degree programmes of the Warsaw University of Technology shows many other examples of courses directly related to education of engineering staff able to take up technological challenges of sustainable and intelligent development of modern civilisation. These are such courses as:

- Environmental Protection and Ecology (Faculty of Chemistry),
- Natural Conditions in Spatial Development Projects (Faculty of Geodesy and Cartography),
- Intelligent Industrial Networks (Faculty of Power and Aeronautical Engineering),
- Innovative Entrepreneurship (Faculty of Transport).

The AGH University of Science and Technology (Akademia Górniczo-Hutnicza) in Cracow offers all types of degree programmes: full-time, part-time, doctoral and postgraduate with a wide education profile adapted to trends arising on the job market. The offer covers 58 fields of study in total, also those connected with mining and metallurgy. These fields of study distinguish AGH among other technical universities and sustainable development is of vital importance in mining and metallurgy. The majority of the 17 faculties run courses directly or indirectly connected with environmental protection and cutting-edge technologies that ensure widely understood safety of the present and future generations. An example may be the Faculty of Mining Surveying and Environmental Engineering, which offers courses such as (www.syllabus.agh.edu.pl):

- Introduction to Sustainable Development for Engineers,
- Introduction to Energy-Efficient Building Design,
- Environment Remediation Technologies,

- Protection against Noise and Vibrations,
- Air Protection,
- Water Management and Protection.

The Wrocław University of Science and Technology (Politechnika Wrocławska) is also one of the largest and best Polish technical universities. 16 faculties offer all types of degree programmes in 51 fields of technical study. A multidisciplinary character of teaching reaches beyond traditional engineering areas and binds technical sciences with mathematical sciences, natural sciences, economics and the humanities. The didactic offer covers more and more courses connected with sustainable and intelligent development. For example, at the Faculty of Civil Engineering, first-cycle (engineering) students have to pass two courses (www.wbliw.pwr.edu.pl):

- Natural Environment of the Human,
- Buildings and Ecology.

The content of these courses covers, i.a., such issues as:

- sustainable development,
- unconventional energy sources,
- energy saving in civil engineering,
- sustainable civil engineering – environmental, economic and social aspects,
- passive and active energy systems.

Another presented technical university – Silesian University of Technology (Politechnika Śląska) in Gliwice is the oldest technical university in Silesia. 15 units (13 faculties, a college and a teaching and research centre) offer at present almost 60 fields of study and 200 specialisations, which cover the whole range of engineering activity. The university also has an active Silesian Centre for Business Ethics and Sustainable Development, which organizes seminars and national and international scientific conferences. The Centre also offers lectures for students of various faculties, mainly about business activity in view of sustainable development. This subject is of course included in many courses offered at the university. The following courses run at the Faculty of Energy and Civil Engineering may be mentioned as examples (www.ise.polst.pl):

- Clean Energy Technologies,
- Low-Emission Techniques in Automotive Engineering,
- Low-Emission Combustion Technologies.

Another example is the Faculty of Transport, which offers, i.a., courses connected with sustainable development, such as:

- Latest Development Trends in Transport and its Environmental Impact,
- Environmental Protection in Transport,
- Ecology in Rail Transport.

Gdańsk University of Technology is one of the oldest technical universities in Poland. It was established in 1904 as a Prussian university. After the Second World War, it was rebuilt after the war destructions and reopened as a Polish university. It plays a special role in the region and educates engineers for the shipbuilding industry and maritime technology. Nine faculties offer degree programmes of all levels in 43

fields of study. The issue of intelligent and sustainable development is visible at all faculties, to a lesser or greater extent. Especially the Faculty of Chemistry offers degree programmes in the field of study Green Technologies and Monitoring with courses such as (www.pg.edu.pl):

- Civilisation Threats and Sustainable Development,
- Management of the Baltic Sea Ecosystem,
- Ecological Aspects of Package Recycling,
- Green Technologies of Nanoparticles.

The Faculty of Ocean Engineering and Ship Technology in the field of study Ocean Technology offers, i.a., courses:

- Environmental Protection Devices,
- Sustainable Technologies of Acquisition of Maritime Natural Resources.

The university also conducts interfaculty degree programmes in the field of study Power Engineering, where the curriculum includes lectures connected with sustainable development:

- Environmental Protection in Power Engineering,
- Smart Building,
- Renewable Energy Sources.

Lodz University of Technology, established in 1945, also plays an important role in education of engineering staff for regional industry. This medium-size university offers an exceptionally wide range of courses related to sustainable and intelligent development, practically in each of the 49 fields of study run by 9 faculties. Most such courses are offered by the Faculty of Chemistry, Faculty of Biotechnology and Food Sciences, and the Faculty of Civil Engineering, Architecture and Environmental Engineering. Selected lectures offered by these faculties are presented below (www.p.lodz.pl):

Faculty of Chemistry,

field of study Biomaterials Inspired by Nature:

- Environmentally-Friendly Methods of Biomaterials Synthesis,
- Social Innovations,
- Breakthrough Chemical Technologies,
- Biological Resources, Biodegradation.

Faculty of Biotechnology and Food Sciences,

field of study Environmental Biotechnology:

- Environmental Biology,
- Sustainable Development and Civilisation Threats,
- Biochemical Aspects of Environmental Protection,
- Microbiological Aspects of Environmental Protection,
- Genetically Modified Organisms.

Faculty of Civil Engineering, Architecture and Environmental Engineering,

field of study Architecture:

- Sustainable Development in Civil Engineering,
- Concept of City Spatial Development,

- Company and Sustainable Development,
- Smart Spatial Development.

field of study City Revival:

- Revival in Humanistic Space,
- Local Cultural Identity in Revival Processes.

Czestochowa University of Technology was established in 1949 as an Engineering School with one Mechanical Faculty. Dynamic development of the university allowed to transform it in 1955 into a University of Technology with many faculties, which provided MSc education in various specializations. The Czestochowa University of Technology is today the largest technical university in the Czestochowa region. It takes a standing place on the scientific map of the country not only as an institution that educates engineers but also as an important scientific and research centre which cooperates with many industrial institutions and plants. Sustainable development has a lasting place in curricula of 6 faculties. As an example, the Faculty of Civil Engineering may be used, which offers courses such as (www.pcz.pl):

- Renewable Energy in Civil Engineering,
- Ecology in Civil Engineering,
- Utilization and Recycling of Building Materials.

Another example are the curricula of the Faculty of Infrastructure and Environment, which include, i.a.:

- New Technologies in Waste Management,
- New Technologies in Wastewater and Sludge Treatment,
- Renewable Energy Sources,
- Clean Combustion Technologies,
- Integrated Systems of Renewable Energy Use.

Traditions of technical education in Wielkopolska date back to 1919, but a university with many fields of study – Poznan University of Technology – was established only in 1955. This university of technology provides education at 8 faculties in 28 technical fields of study. Two of them are exceptional in terms of the number of courses related to sustainable development (www4.put.poznan.pl). At the Faculty of Architecture, curricula include, i.a.:

- Energy-Efficient Architecture,
- Management of City Sustainable Development,
- Revival of Inner City Areas.

The Faculty of Civil and Environmental Engineering, in turn, offers the field of study Sustainable Building Engineering, where compulsory courses include:

- Modern Architecture in Renewable Energy Systems,
- Sustainable Civil Engineering,
- Sustainable Transport,
- Sustainable Municipal Economy.

The last example clearly shows how fast the reaction of university authorities is to the needs and challenges of modern civilisation.

Limited length of this paper does not allow a full description of the teaching offer connected with sustainable and intelligent development. The presented examples of selected technical universities enable, however, some analysis and evaluation of the contribution of these universities to the process of education of engineering staff prepared to take up the challenges of another technological revolution.

Conclusion

Contribution of technical higher education to sustainable and intelligent development goals may be investigated from two perspectives: contribution to design and implementation of innovative technological solutions and education of engineering staff prepared for creative work in this field. The latter has been analysed in this paper on the example of the largest Polish technical universities: Warsaw University of Technology, AGH University of Science and Technology, Wrocław University of Science and Technology, Silesian University of Technology in Gliwice, Gdansk University of Technology, Lodz University of Technology, Czestochowa University of Technology and Poznan University of Technology. Even a quick look at their teaching offer allows to state that these universities take up issues connected with the latest research and application trends, which is clear when one analyses the subjects of lectures, tutorials, laboratories and diploma theses. Thus, it confirms the hypothesis stated at the beginning of the paper that the specificity of technical universities naturally binds them with implementation of sustainable and intelligent development of modern civilisation.

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PRESENCE AND THE FUTURE OF CSR IN THE OPINION OF MANAGERS RESPONSIBLE FOR THIS AREA

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Abstract: The idea of corporate social responsibility since its inception, i.e. from the twentieth century,¹ is constantly changing, evolving towards the strategic component of the enterprise management system. This is due to the increasingly difficult market, in other words, the environment where companies need to look for new competitive areas in which they could gain an advantage. At present, it is not only economic factors that offer such advantage, not even social or environmental one, but it's cooperation between them to create the so-called synergy, not necessarily for short-term financial effects (Skiba, Albrychiewicz-Słocińska, Gavril-Paven, Pobór, Czarnecka 2017, p. 675).

Creating or implementing management strategies is a task for managers, depending on including CSR, or not and what character the managers assign to it. It can therefore be assumed that the future of CSR lies in the hands of business managers. Unfortunately (as shown in the research), a significant group of company managers is guided solely by profits in making decisions (in particular managers of financial departments). Although the very essence of a company's profit is not contradictory to the concept of responsible business, it can not be regarded as the only business goal. Of course, profit belongs to the engines of entrepreneurship, being one of its goals, but CSR points out that not every way to make a profit is right.

The aim of this study is to present the concept of CSR and its description from the point of view of managers responsible for this area in companies

Key words: Corporate Social Responsibility, CSR, sustainable growth, business.

Introduction

Enterprises that want to be modern today have to face, among others, the problem of responsibility. It involves the practices of companies in the area of: sponsoring or charity activities for the benefit of ones in difficult situations; environmental protection (so-called ecology); or supporting the needs of the local community. Whether the interest of CSR in enterprises is a manifestation of a steady upward trend or temporary fashion, will prove itself within the coming years.

In the present terminology defining the idea of corporate responsibility, the most important abbreviation is CSR (from: Corporate Social Responsibility), but also often used the terms: "social responsibility of enterprises", "business social responsibility", "responsible business", "business responsibility", "civic enterprise", "social involvement of business", "sustainable development company" (2012, pp. 427-428) - in this study these terms will be used interchangeably.

¹ One of the first book about CSR was written in 1953 and it was „*The Social Responsibilities of Businessman*” of H. Bowen.

The idea of corporate social responsibility came to Poland in the 1990s, with the international corporations entering the domestic market. However, the very limited purchasing power of consumers (the only purchase criterion was the price) gave CSR marginal significance.

A sustainable development company aims to create higher living standards while maintaining the profitability of running a business. Raising the standard of living would apply to people from within the company as well as from outside (eg clients, cooperators, local communities) (Hopkins 2007, p. 15).

The good economic situation in Poland (and in the world), which continues to develop for several years, creates the possibility of momentum for the idea of responsible business. This is influenced by: increasing the purchasing power of citizens and increasing the demand for high-quality goods, as well as opportunities for a consumer to choose buying from a responsible company or not, which makes the matter to look simple.

However, the development of CSR may not appear miraculously, without managers' faith in significance of social involvement, hence the great role of education in the discussed area.

The purpose of this paper is to examine the opportunities for CSR development. Therefore, considerations will be made to explain how, from the perspective of past and experiences, managers responsible for CSR assess the implementation of the idea of responsibility in their companies. The implementation of the indicated objective was based on the comparative analysis and synthesis method based on secondary data (reports from PBS and Deloitte research) and a review of literature.

The responsible business essence and concepts

Apart from multiplicity of concepts descriptions of business responsibility, one can encounter various definitions of this idea. Most probably, this is due to the multifaceted concept of social responsibility: considerations on the basis of economics, law, sociology or philosophy (ethics).

Precursor of CSR A. Carnegie, a billionaire from New York in his essay named "Wealth" published in 1889 presented his concept of using surplus fortune for social purposes. He used to say that "a man who dies rich, dies disgraced", however, he did not mean charity, but he thought that one could help others only by enabling knowledge (Carnegie meant the proverbial "rod" instead of "fish").

H. Bowen, who was considered the father of the idea of responsible business, defined the social responsibility of entrepreneurs (and not of the organization - as in the present sense). In this definition, he gave entrepreneurs "the obligation to conduct policy, make decisions and carry out activities that coincide with social expectations" (Bowen 1953, quoted in Rudnicka 2012, p. 39).

Since Bowen, there has been a gradual development of the concept, but people dealing with this issue are divided into supporters and opponents of corporate social responsibility. The classic attitude of CSR's opponents was M. Friedman, who claims that "social responsibility rests solely on individuals, while corporate responsibility is

limited to ensuring profit for shareholders" (Gasparski 2012, p. 218, Zadros 2016, p. 350).

P. Drucker, on the other hand, disagrees with M. Friedman, saying that "the economy of operations is not the only sphere of corporate responsibility ..." and that "every organization must accept responsibility for the impact it has on its employees, the environment, customers and every entity with which he has contact. This is social responsibility" (Drucker 2011, p. 126).

Contemporary CSR definitions raise (as part of pro-social activities) the importance of ethics and actions for environmental protection. For example, the World Business Council for Sustainable Development defines business responsibility as the ethical behavior of the company towards society, the essence of which is economic development while improving the lives of employees, their families, the local community and even the whole society (Zbiegień-Maciąg, pp. 48-49). In the opinion of L. Zbiegień-Maciąg, CSR of the company is a moral responsibility connected with the obligation to account before the public for its activities against owners and employees (internal environment) as well as shareholders and clients, local authorities, pressure groups, ecological movements, from consumers, suppliers, cooperators, and state administration (external environment) (Zbiegień-Maciąg, pp. 48-49). K. Davis and R. Blomstrom also write in a similar spirit by combining the company's own interest (multiplying profit) with increasing social well-being.

In the literature of the discussed issue, one can come across attempts to organize the approaches to CSR.

One of such attempts was undertaken by E. Garriga and D. Mele, taking into account the concept of corporate social responsibility in their division: economic aspects (instrumental theories - enterprises are tools for "making money" and this fact determines social responsibility), political (political theories - emphasize the social impact of enterprises, and if they can contribute to solving social problems, they have a duty to do so), social and ethical (integrated and ethical theories - organizations should respond to social needs in accordance with the values recognized by this society as valuable) (Garriga 2004, quoted by Stefańska 2013, pp. 199-200).

Another categorization of approaches to CSR concerns its impact on business strategy and increase in competitiveness. These are the following theories: stakeholders (it is justifiable to include enterprises in social enterprises in that thanks to such measures they can get support from the environment for their strategic plans), managerial (profit is not the sole goal of the company, managers decide about the direction of the company's development and implementation CSR), social contract (emphasizes the inclusion of normative and practical socio-cultural context in the management of the organization, on the basis of an enterprise agreement with the public), as well as a resource and position school (assumes that each enterprise has unique resources and capabilities that result from the path of growth chosen by the company, competitive advantage is ensured by diversification, not the mobility and unavailability of these resources for other economic entities) (Garriga 2004, quoted in Stefańska 2013, pp. 199-202).

At present, the current of strategic management (part of which is a resource and position school) is clearly in the forefront of all justifications for the competitive advantage of enterprises. M. K. Kramer draws attention to the special type of resource that gives the competitive advantage of CSR. The implementation of the idea of a responsible company leads to the creation of a unique value that can be the foundation of a lasting advantage over the competition (Porter, Kramer 2011).

Social responsibility of business in the opinions of CSR managers – a research study

Extensive research among the CSR managerial staff was carried out in 2015 at the request of the Responsible Business Forum. The research was entrusted to two research centers: Pracownia Badań Społecznych (Social Studies Workshop) (in Poland) and Deloitte (in 10 countries of Central Europe - in the Czech Republic, Slovenia, Bulgaria, Kosovo, Romania, Serbia, Hungary, Slovakia, Lithuania and Latvia). The results of these studies are two reports: "CSR Managers" and "CSR Managers in Central Europe" (the original "CSR Managers Survey 2015 in Central Europe").

As part of the Polish survey section (conducted May-July 2015), two components were implemented - quantitative (133 interviews) and qualitative (16 respondents). "The research sample was a deliberate attempt, constructed on the basis of the separation of over 300 companies that met one of the following criteria: they had to be a Strategic Partner of the Responsible Business Forum; had to report its good practice to the FOB report "Responsible Business in Poland. Good Practices "; had to be a signatory of Vision 2050; had to participate in the Ranking of Responsible Companies; had to participate in the Respect Index; had to sign the Diversity Charter. From this group of companies, one person has been distinguished, whose duties and activities made this person a qualified CSR manager." (PBS report, 2015).

However, the survey named "CSR managers in Central Europe" (carried out July-September 2015) reflects the opinions of 179 CSR practitioners from the Central European region and was the world's first such type of research initiative on an international scale (Deloitte report, 2015).

The task of this study will be, by means of analysis and comparative synthesis based on secondary data and literature review, an attempt to compile the above two PBS and Deloitte reports. The author of this study has failed to reach a comprehensive comparative report (which he finds indispensable) showing the differences in the perception of CSR by managers in Poland compared to other Central European countries, which is why he hopes that this work will fill this gap.

Based on the data presented in the table 1, one can build a CSR manager profile. Who then is the statistical CSR manager? She is certainly a woman, but when it comes to work experience (as well as age) in CSR, in Poland it is different, and in other countries of Central Europe, in most cases, it does not exceed 5 years. This woman works for a large enterprise (over 250 employees), most often the financial-banking, commercial or energy industries.

Table 1. Characteristics of respondents

	Central Europe N=179					Poland N=133				
gender	male			female		male		female		
	37,4%			61,5%		21%		79%		
age	up to 34 years old	35-39 years old		40 years and more	up to 34 years old		35-39 years old		40 years and more	
	no data				33%		23%		41%	
seniority in CRS	under 5 years		6-10 years	above 10 years	up to 4 years		5-9 years		10 years and more	
	60,9%		27,9%	10,6%	38%		28%		33%	
company size	micro	little	average	big	micro	little	average	big		
	6,1%	7,8%	22,3%	63,1%	5%	14%	15%	65%		
trade	finance/banking			17,9%		finance/banking			17%	
	architecture			7,3%		architecture			6%	
	education			2,8%		education			5%	
	power engineering			13,4%		power engineering			11%	
	trade			11,2%		trade			17%	
	marketing			2,8%		marketing			5%	
	transport/shipping			6,1%		transport/shipping			6%	
	IT			6,7%		IT			5%	
	industry/production			7,3%		industry			8%	
	media/entertainment			1,7%		media/communications			3%	
	telecommunication			3,4%						
	non-governmental organizations			1,7%		services			4%	
	health/beauty/pharmacy			7,8%						
	consulting			2,2%		HR			5%	
	car industry			2,2%						

*missing percentages up to 100% in individual categories mean refusal of response
Source: own study based on - Deloitte report „How CSR has influenced Central European societies and economies. Lessons learnt and future trends” and the report of Pracownia Badań Społecznych „CSR Managers”, 2015

Longer work experience of Polish CSR managers may result from the higher speed of free market changes in our country (we deal with CSR longer) or there is a large fluctuation at these positions (in the countries from the Deloitte study). According to Polish research, the following factors contributed to the promotion of CSR in Poland: the presence of international corporations in our country (78%); personal involvement of individual employees, including companies managers (53%); the need to adapt to the requirements of business partners (42%); activities of non-governmental organizations (35%); and others of lesser importance.

In order to be able to define CSR itself, it is necessary to know in advance which non-financial areas the business should care for, ie what managers assign a role to it.

Table 2. The role of business

observed		expectations	
Central Europe N=179	Poland N=133	Central Europe N=179	Poland N=133
mitigation of problems related to environmental protection	environmental protection	fight against corruption	
fight against unemployment	social assistance		
supporting education	education		

Source: own study based on - Deloitte report „How CSR has influenced Central European societies and economies. Lessons learnt and future trends” and the report of Pracownia Badań Społecznych „CSR Managers”, 2015

Respondents' opinions (irrespective of the country in which the research was conducted) are consistent, namely that the business is committed to: environmental protection, fighting unemployment (where there is a high rate) or social assistance, and education. What is important, the respondents also pay attention to what they would expect from business, and as it turns out, it is fight against corruption. Responsible business should, in their opinion, ensure integrity in the free market, i.e. a guarantee of respect for the same rights and obligations for all business participants. They would also expect the creation of a system that would efficiently stigmatize abuse and, if necessary, eliminate pathological subjects from the economic life.

Despite the imperfection in the area of CSR, in the opinion of managers, the business has contributed to solving many socio-economic problems in recent years: 65% of respondents in Poland shared this opinion and 84% in 10 other Central European countries. The main areas in which this business affected were: changing the way companies are shaped, paying attention to ecology, paying attention to society, increasing the level of ethics in the workplace, introducing activity reporting, increasing cooperation with the environment, charity activities, participating in social campaigns.

Therefore, the CSR management team notices the positives of its activity, and can do so by measuring its own initiatives. In the discussed studies, in their Polish part, measurement and reporting was a prerequisite for participation in the study, so we do not get to know the actual number of companies measuring social responsibility activities. As for Deloitte's research, 54% declared CSR measurement; 24% said they did not measure the effects of their actions; and 22% refused to answer. It should be recognized that this is a high result, which is the result of gained and expected benefits.

The opinion of CSR managers, brings the understanding that these managers most often apply to the implementations of the idea of responsible business: employee volunteering and dialogue with stakeholders (both in Poland and the other countries surveyed).

Table 3. Methods, tools and manners of management considered the most useful in the work of a person involved in the implementation of CSR

	Central Europe N=179	Poland N=133
Employee volunteering	36%	35%
Dialogue with stakeholders	35%	46%
Social campaigns	29%	22%
Ethical programs for employees	29%	26%
Pro-environmental programs	29%	14%
Socially responsible investments (SRI)	27%	26%
Charitable and philanthropic activities	22%	13%
Management systems (np. ISO 9000, ISO 14000, SA 6000)	17%	11%
Customer relationship management (CRM)	16%	20%
Sustainable supply chain management	16%	24%
Intersectoral cooperation	15%	17%
Social reports	8%	17%
Diversity management in the workplace	6%	15%

Source: own study based on - Deloitte report „How CSR has influenced Central European societies and economies. Lessons learnt and future trends” and the report of Pracownia Badań Społecznych „CSR Managers”, 2015

As mentioned earlier, the CSR managerial staff recognizes the socio-economic benefits of their initiatives, measures its effectiveness and determines the areas of engagement. It would be naive to think that managers would do it all if their company did not benefit from it (see Byłok 2017, p. 541).

Table 4. Key benefits of CSR activities

	Central Europe N=179	Poland N=133
increasing the level of employee involvement	65%	71%
reputation improvement	55%	62%
improving relationships with local communities	53%	69%
increasing the brand's recognition as responsible/sustainable	51%	70%
raising the level of employee awareness in the field of ethics	46%	74%

Source: own study based on - Deloitte report „How CSR has influenced Central European societies and economies. Lessons learnt and future trends” and the report of Pracownia Badań Społecznych „CSR Managers”, 2015

The research shows that Polish CSR managers see more benefits from the use of responsible business than respondents from Central Europe participating in the Deloitte study. The difference between the priority benefits is also noticeable: in Poland - raising the level of employee awareness in the field of ethics; and in the other surveyed countries - increasing the level of employee involvement.

However, as claimed by CSR managers, their activities are not only the right decision sets and achieved successes, with general support inside as well as outside the company. Therefore, we are talking about difficulties and obstacles that disrupt the

work of CSR department managers in organizations. The most frequently mentioned in PBS research (Polish managers) are: lack of understanding of the idea by corporate managers (46%), belief that CSR is "unprofitable" - that there are no benefits (45%), no adequate management (41%)), understanding of CSR in the category of sponsoring activities (40%), lack of pressure from consumers (32%), lack of incentives from public administration (26%), economic crisis (19%), lack of information in the media and public debate (18 %), reluctance from enterprises to invest (14%), others (1%), lack of problems (0%).

Wrestling with difficulties is the daily life of every manager. A person properly prepared for this profession can not only react correctly to obstacles, but also predict such.

Table 5. Obstacles seen in the further development of CSR

	Central Europe N=179	Poland N=133
incorrect perception of the idea of CSR as a form of sponsoring activities	59%	57%
lack of incentives from public administration	52%	57%
business reluctance to invest funds in CSR activities	46%	47%
the belief that CSR is "unprofitable" - there are no benefits	40%	64%
lack of understanding of the idea by the management staff of the companies	39%	66%
the economic crisis	36%	41%
lack of information in the media and public debate	35%	43%
lack of proper education of the management staff	27%	66%
no pressure from consumers	24%	44%
other	2%	2%
there will be no problems	0%	0%

Source: own study based on - Deloitte report „How CSR has influenced Central European societies and economies. Lessons learnt and future trends” and the report of Pracownia Badań Społecznych „CSR Managers”, 2015

From the Deloitte report, we learn that managers from Central European countries are afraid that CSR activities will only be brought to sponsorship, and in addition, public administration will not support such initiatives. It follows that the respondents feel the pressure of financial expectations after CSR, in addition without state support.

Polish managers of CSR departments see the source of problems with the idea of corporate responsibility elsewhere. The burden of difficulty is transferred to the management staff of companies, their lack of understanding of CSR philosophy and the focus on financial profit in the near term, and this reluctance to CSR, may result from the lack of adequate education of managers.

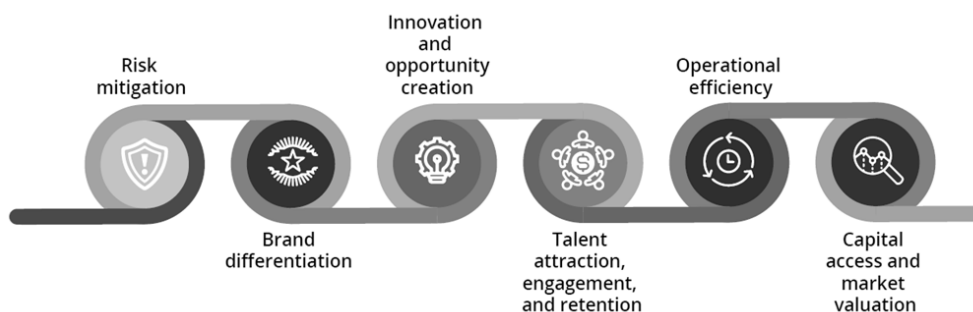
Summary

Despite the described obstacles to the implementation of CSR, managers in all countries selected for research are unanimous in their optimism as to the further development of the idea of responsible business. Positive thinking in Poland is represented by 79% of respondents, 18% think that CSR will be in a state of stagnation, and what is important, no one has decided that the idea of corporate social responsibility will come to an end. Among the other countries participating in the research, faith in the development of CSR ranged from 55% in Hungary, to 100% in Lithuania, and pessimism rated between 0% in Lithuania and 45% in Hungary (of which 10% think that CSR is going to decrease).

Optimism in relation to the further development of CSR may be associated with a strong conviction that in the near future many companies will change their business model due to the pressure of customers expecting socially responsible products and services from the market (Cent Eur. = 86%; Pl = 80%). On the one hand, CSR managers in the future see an obstacle in the "lack of pressure from consumers" (Cent Eur = 24%, Pl = 44%), and on the other hand, in this pressure they see the foundation of changes towards the development of corporate social responsibility (Cent Eur. = Pl = 75%).

However, the CSR management team does not put all hopes on CSR development solely having a belief that customers will start to reward companies that are socially involved, by purchasing a product or service only from such an enterprise. They undertook systemic inclusion of CSR initiatives in the assessment of factors that increase company value, in other words: risk reduction; innovation and creating opportunities; operational efficiency; brand differentiation; attracting talents, employee engagement and retention; and access to capital and market-based pricing. (Deloitte report 2016 and 2017)

Figure 1. Six key factors contributing to the growth of the company's value through taking actions in the field of sustainable development



Source: „Social purpose and value creation”, Deloitte 2017

The presence of CSR among the companies' valuation factors will directly affect the boards of these enterprises, which have not seen "benefits" so far in implementing the described idea. After such a procedure, CSR will become financial non-financial.

In order to include CSR in the companies' valuation factors, a directive on disclosing non-financial data was introduced, the implementation of which, according

to 69% of Polish CSR managers will have positive effects on the way of social reporting in Poland.

The Polish PBS report also shows that the current method of reporting CSR is insufficient.

Table 6. Weaknesses inherent in investors' opinion in current CSR reporting

the current level of disclosure of non-financial information by companies is insufficient	78%
the non-financial information currently disclosed by the companies is intangible and immaterial	93%
financial and non-financial data should be more integrated	92%

Source: own study based on Eurosif report and ACCA ppt. "What do investors expect from non-financial reporting?", 2013. The survey was conducted among 94 investors, analysts and representatives of other stakeholder groups from 18 countries

Its main weaknesses are: low level of disclosure of non-financial information by companies; the non-financial information disclosed by the companies are intangible and insignificant; financial and non-financial data should be more integrated. (Eurosif report and ACCA 2013)

Referring to the above, preparations were made for a new way of reporting corporate social responsibility, aimed at eliminating weaknesses (table 6), as evidenced by the Deloitte report *"New guidelines and trends in reporting. Non-financial issues and building company value."*

From the Ocean Tomo research named *"Components of S & P 500 market value"* (Ocean Tomo report, LLC, 2015) shows that right now (as for 2015) intangible assets of companies constitute 50% to 84% of the value of the company, and the Novomatic report reports about 87% (report Novomatic 2017, p. 6). This is certainly a good prognosis for assessing the future of CSR.

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PROBLEMS OF SELF-MANAGEMENT AND COACHING

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Abstract: The idea of self-management was introduced into management science by P.F. Drucker at the turn of the 21st century. Self-management can be viewed as using resources and life energy in order to utilize person's own potential according to his or her life mission, values and priorities, which allows for greater satisfaction from their own activities and improves the quality of relations with other people. Furthermore, coaching can be approached as a practical tool that is conducive to self-management through introduction of changes in the areas of life of the individual where such changes are needed or desired. The paper emphasizes the place and role of self-management in management sciences and problems of developing self-management skills by managers using coaching techniques.

Key words: coaching, manager, self-management

Introduction

The idea of self-management contains many skills which are useful from the standpoint of contemporary people, who work and are often overloaded by various requirements. These include development of human potential based on the person's values, strengths, priorities; creating the vision and mission in the life; developing proactive attitudes connected with skilful time management; caring for well-being and quality of relations with other people. These abilities cannot be overestimated and, therefore, they can be developed by means of various tools, including coaching. With the support of coaching, the manager can actively recognize the mechanisms that govern the change, extend the field of self-awareness, analyse and idea or a problem from new standpoints and design and implement concrete actions connected with the area of the desired change.

The paper concerns the problems of the importance of self-management in management sciences and presents the proposal for the development of these skills by managers using coaching techniques according to the concept of Stephen R. Covey (2017): „*Private victories precede public victories. You can't invert that process (...). You have to start from the inside.*”

The present paper is an extension of the text “*The Use of Coaching by Managers to Develop Self-Management Skills*”, which was published in the proceedings from an international scientific conference “*Leadership, Innovativeness and Entrepreneurship in a Sustainable Economy*”, which was held from 7th to 8th June 2018 in Czestochowa, Poland.

Background

In 2002, the Society of Managers in Poland adopted the *Code of Manager's Ethics*, which contains e.g. the following provision pertaining to relations inside the organization:

„A manager is oriented at constant and harmonious development of their own personality and the co-workers they manage” (Gasparski 2012, p. 315).

The provision places the area of personal development which is important to contemporary people in the centre of manager's attention. However, it should be emphasized that the phrase "harmonious development of personality", which sounds very well in this document, is relatively enigmatic from the standpoint of practice as it is unclear what it should mean. Understanding of the complexity of this postulate by managers can be facilitated by the concept of self-management introduced by Peter F. Drucker (2006, 2009) at the turn of 21st century, which emphasized the importance of self work for proper performance of the adopted professional roles according to the principle of *„you cannot manage other people better than you can manage yourself”*. Furthermore, this idea, which is new in management sciences, can be understood from the standpoint of historical tradition as a continuation of the ancient commandment: *„meet yourself”*¹ that has been considered for ages as the most important task in human life which has always been the most difficult task. As emphasized by Renata Gut, *„we are not (...) experts in ourselves. We do not understand why we think, feel, act, respond and communicate in certain ways. We do not know how we influence others, how they see us, how we impact on them and what impressions we make”* (Gut et al. 2008, pp. 18-19). Furthermore, it should be emphasized that humans tend to be full of contradictions: they may want security, peace and quiet and stabilization offered by constant work and freedom, adventure and exciting experiences felt during realization of dreams (Samitowski 2016).

With the onset of positive psychology at the end of 20th century in the USA, the paradigm changed substantially: psychology, which was previously focused on disturbances, maladjustment, emotional traumas, prejudices, negative effects of human activity, started to examine factors that determine human happiness, development, internal force, mental health, satisfaction from life, feeling the sense of life, feeling responsibility, ability to make choices etc. Scientists, who have searched for inspiration in e.g. hedonistic mainstreams and ideas of Aristotelian eudaimonia (Czapiński, 2012, pp. 13-17), designed and performed their research through creation of *„the science on human strengths and personal fulfilment”* (Seligman 2012, p. 21). The current of positive psychology is characterized by the research ordered or performed by Daniel Goleman (1997, 1999) that identified the characteristics which are of key importance to the development of the employee's career, which make him or her able to be successful at work and examined how these characteristics can be improved. This research resulted in creation of a general framework for emotional competencies (self-awareness, self-regulation, motivation, empathy, social skills). The current of positive psychology, health and personal development also involves the

¹ See inscription on the temple in Delphi, Socrates heritage.

research on employees' recognition and utilization of their strengths and the research concerning the focus of the successful enterprises on strengths of their employees and definition of mission in their teams (Buckingham, Coffman, 2009; Buckingham 2010).

This paper reviews selected items of literature on self-management (monographs and books) which are available in Polish.

Review-of-Literature

Various definitions has been used since the introduction of the term of self-management into management sciences. The classical definition, formulated by Drucker (2006, 2009), puts emphasis on:

- recognition and use of person's strengths,
- giving up bad habits,
- analysis and drawing conclusions based on feedback information,
- care for personal culture,
- definition of person's own style of learning and working,
- acting based on a system of values,
- determination of the person's own place at work,
- thinking about personal contribution to the development of the organization,
- caring for interpersonal relations in the enterprise and
- developing additional interests in order to avoid routine and prepare for the second half of life.

Renata Gut, Maria Piegowska and Barbara Wójcik, the authors of the book „*Self-management. The book about acting, thinking and feeling*” (2008), understand self-management as a conscious, economic and ecological use of personal resources in human life.

In the concept concerning self-management, they emphasized:

- taking responsibility for person's own life and his or her own career path,
- development of self-awareness (extending knowledge about person's own functioning, thinking, acting, decision-making, motivation, emotions, building relationships, recovery, feeling of their own value, knowledge of the person's needs),
- recognizing and developing of personal resources;
- recognizing talents and using them to build person's strengths;
- ability to cooperate (Skolik, Robak 2016),
- recognizing mechanisms, sources of stress and developing resources which help them cope with stress,
- learning how to manage yourself in stressful situations.

Covey (2017) wrote about habits that help people act effectively and emphasized the importance of:

- moving on a scale of maturation from dependency (I entirely depend on you) through independence (I take responsibility for myself) to co-dependence (understanding that we are connected with each other and that cooperation can

help create something bigger and more outstanding than what we could create in isolation),

- proactive attitude (taking responsibility for your own life, behaviours as a result of conscious choices that are consistent with the values, taking initiative in life),
- having a life mission (life philosophy), with the person answering himself or herself to the questions about who they want to be, what they want to do in life and which values they want to be based on; definition of what is the most important to them (e.g. relationship, family, money, work, pleasures, principles),
- learning how to manage leisure time (doing what is important and not urgent, building relations, seeking opportunities, creating life mission, establishment of long-term plans, physical activity),
- striving for real understanding of other people,
- keeping obligations and promises,
- maintaining internal honesty (cohesion),
- thinking using the win-win categories (striving for solutions which are favourable for everyone),
- caring for body and mind, development of spiritual, social and emotional areas.

In one of her more recent publications in the Polish market, Beata Kozyra (2015) stressed the following factors:

- self-understanding,
- openness to changes, proactive development of your own life,
- creating vision and mission in life,
- learning to manage time effectively,
- determination and achievement of important goals,
- maintaining self-discipline,
- self-motivation,
- - learning to make decisions and solve the problems,
- - being assertive,
- skilful management of your own emotions,
- coping with stress,
- caring for recovery of resources in all areas of human life.

An interesting approach to understanding of self-management was proposed by Ken Blanchard, Susan Fowler, Laurence Hawkins (2018), the authors of the book *Self Leadership and the One Minute Manager*.

The emphasis of their concept of self-management is placed on:

1. Adopting self-responsibility (determination of the factors that improve self-motivation, constant analysis of the assumed limitations and challenging them)
2. Learning, improving, using and appreciating your own strength and aptitudes as well as strength of your partners.
3. Determination of your own competence level (knowledge and skills) and level of involvement connected with the achievement of the set goal by finding your own place in the development continuum, which includes the following stages.

- D1 - stage of Enthusiastic Beginner (low competence level, high level of involvement),
 D2 - stage of Disappointed Learner (low competence level, low level of involvement),
 D3 - stage of Efficient but Cautious Performer (moderate/high competence level, varied level of involvement),
 D4 - stage of Advanced Success Winner (high competence level, high level of involvement).
4. Open and direct determination and expressing your own needs connected with the place in the continuum and goal to be achieved.
 5. Starting cooperation with others.

Discussion

As can be seen from the above investigations, publications concerning self-management contain numerous indications that draw attention of the reader to what is important to humans who want to make effort of self-development in order to utilize their own life energy and resources in the manner which is the best for themselves and their environment. The pressure is on responsibility for yourself, learning yourself, caring for yourself, being based on values, having a vision and mission in life, proactive attitudes, developing personal resources, resting development on strengths, determination and achievement of important goals, starting cooperation, self-management in time, effective time management, stress management. All these proposals can be considered as a knowledge basis useful for the manager. However, although extremely important, having the knowledge is insufficient to harmoniously develop yourself and others while the most critical factor is ability to actively introduce it in life. This is not always easy as various obstacles can be encountered on the way to achieve this goal, with most of them blocking human activity from their inside. The most important are fear and resistance to changes (Autissier, Moutot 2013, p. 21; Randak – Jezierska 2015) and their derivatives, such as: postponing changes, fear of failure and making a fool of yourself, fear of success, inconsistency in actions, using lack of time or lack of ability to cope with stress as an excuse, which help return to previously developed bad habits and strategies of acting.

These difficulties can be overcome by coaching.

First and foremost, it is critical to understand the mechanisms that govern the change. Using the coach's support, the manager can actively use the tools that bring closer and help get used to the change, such as *change arc* and *Fisher curve*.

1. Change arc

The tool shows the course of the process of changes to the manager, with three consecutive stages:

- A. *Thawing*. At this stage, the manager perceives the need for changes. He or she is willing to go beyond the routines created by habits and ineffective patterns of thinking and acting. They determine the needs. They build vision of the future and build internal motivation for changes.

- B. *Change – fluctuations*. This is the stage of seeking alternatives. The managers experiment with new and previously unused methods of thinking and acting. They analyse the successes and failures resulting from these experiments.
- C. *Freezing*. This stage involves accepting new solutions. The manager chooses and establishes the best solutions in the form of a new pattern.

2. Fisher curve

This curve shows which positive and negative emotions can be experienced by any person who attempts to change and how they impact on the attitude towards changes. Knowledge of individual stages can facilitate the manager's engagement in the process of changes and help them cope with stress caused by what is new and unknown. It can also show that other people also experience similar stages, and, that these stages are normal and even demanded from the standpoint of the process itself. The Fisher curve shows that fear, feeling of threat, depression and disappointment are just the elements of the process of changes through individual progress (Marciniak, Rogala-Marciniak 2013).

Furthermore, it is important that the manager familiarizes with the coaching path and realizes the tasks that the coach and client are challenged with during coaching process (*Table 1*), since this can represent an additional stimulus to use this type of path in their personal development.

The following stages can be distinguished in the coaching process (Starr 2011):

1. *Buidling a good contact*. Caring for the atmosphere which is conducive to coaching. Remembering that the coach and the client are equal partners who are obliged to respect each other.
2. *Isolation of the topic and purpose*. The customer specifies what they expect from the session. They determine the topic and aim of the meeting. The coach supports them in specification of the aim.
3. *Reaching understanding and insights*. The most important stage in the coaching path. With his or her skills (careful listening, observation, asking productive questions, facing challenges), the coach helps the client extend awareness with respect to the specific situation (new perspective, perception of the problem from another standpoint) and formulate their own conclusions.
4. *Conclusions and arrangements*. Summary of the client's ideas and conclusions by the coach. Helping planning further concrete steps by customers. Motivation for action.
5. *Closing and ending*. Confirmation of completion of the conversation. Ensuring that the client feels good with what they achieved during the meeting. Obtaining support for further action.

Table 1. Coach's and client's tasks in the coaching process

COACH'S TASKS	CLIENT'S TASKS
Monitoring of the change process <i>What have you managed to do so far?</i> <i>What stops you now?</i>	Mobilization for changes Need for changes Need for seeing the problem from new standpoint
Helping determine a precise goal <i>What would you like to achieve at the end of this session?</i> <i>What will make you entirely satisfied with the meeting?</i> <i>How will you know you've achieved the goal?</i>	Specifying the goal
Appreciation of the client Creating the climate of trust Quality of listening (friendly, open, without assessment) Encouraging to identify personal resources Encouraging to look closer to fears and resistance to change and transform them into concrete needs Seeking positive intentions that maintain client's behaviours Perceiving failures as feedback information for the client	Appreciation of personal experiences <i>I have overcome many difficulties.</i> <i>I have solid foundations that help me cope with various situations.</i> <i>I look at my fears and resistance to change and transform them into needs.</i> <i>I have resources which I can use to develop and achieve the goal I want to achieve.</i>
Encouraging the client to create many various opportunities for activities <i>What can you do?</i> <i>What else can you do?</i> <i>What other ideas do you have?</i> <i>Who can help you?</i>	Creating various opportunities for acting Identification of sources of support
Giving the client a space for reflection, silence, extending awareness	Making decisions concerning acting
Accompanying the client in the process Motivating the client for acting <i>What will be your first step?</i> <i>How will you know you made it?</i> <i>Who will you celebrate the victory with?</i>	Action Creating a concrete action plan

Source: author's own elaboration based on: Cannio, Launer 2008

A good example of the coaching tool that can be successfully used by a manager to develop self-management skills is **the Dilts logical levels model**. The model is composed of 6 levels and the corresponding questions which are important during the analysis of a new idea, construction of the project, planning activity that is aimed to solve a concrete problem, reinforcing motivation etc. (Table 2).

Table 2. Dilts logical levels model

Logical levels:	Examples of questions:
6. SPIRITUALITY, VISION	<i>Who else will benefit from this? Who do I do this for? Which idea I act for?</i>
5. IDENTITY	<i>Who am I? Who will I be? Who can I be?</i>
4.VALUES AND BELIEFS	<i>Why do I do this? Why is it important to me? For which reason do I want to achieve this goal?</i>
3. CAPABILITIES	<i>How can I achieve this? What capabilities/competencies/resources do I have? Which other capabilities do I have to develop?</i>
2. BEHAVIOURS	<i>What will I do to achieve the goal? What do I actually do? What will I do later?</i>
1. ENVIRONMENT (EXTERNAL ENVIRONMENT)	<i>Where am I? Who am I? Who am I with?</i>

Source: author's own elaboration based on: Wilczyńska et al. 2013, pp. 162-168

Questions associated with specific logical levels help clients e.g. systematize the method of functioning in the external environment, see the selected goal from many standpoints and organize values; realize the skills, define his or her identity, create the vision consistent with values. Furthermore, each change made by the client at one level impacts on the lower level in the presented model. Going through all the levels in the model, the client obtains the answers to the questions about who they are, what is important to them, what they feel, which resources they have, what they have to learn and which concrete actions they have to take in order to achieve the intended goal (Wilczyńska et al. 2013, pp. 162-168).

In the coaching process, two plans are similarly important for both clients and coaches:

1. big plan (essence of the process) concerning the quality of life and experiencing each moment according to the values and beliefs („*What would you like your life to be?*”, „*Who are you becoming?*”, „*How is it when you feel alive?*”),
2. small plan, including determination and accomplishment of individual goals and adopting responsibility for your own actions.

The task of the coach is to ensure that the activities designed by the client are consistent with their values. The client's life should rest on what is important although not always easy. Sometimes the choices are influenced by anxiety, convenience, opportunism or the need for avoiding problems. The price for compromising the

values is feeling tension, sense of betraying yourself. The reward for being based on the values is feeling of fulfilment, sense of integrity and sense of internal rightness and honesty. Discovery and clarification of important things and developing a personal list of values resembles creating of a map that helps choose the ways of acting („*Will this activity bring you closer to respecting your values or will it push you away from them?*”) (Kimsey-House et al. 2014).

Various tasks can be used in coaching to determine your own hierarchy of values. One example is an exercise proposed by Dominika Lebda (2017), composed of 5 stages.

Step 1: Choosing previously prepared general list of values of all things important to you (examples: love, freedom, faith, health, dreams, convenience, wealth, pride, patriotism, leisure time etc.).

Step 2: Choosing ten of all most important values.

Step 3: Choosing five of ten values that are absolutely the most important to you.

Step 4: Organization of the hierarchy of five the most important values.

Step 5: Deep reflection over each chosen value and its place in hierarchy („*How do I understand this value?*”, „*Why is it that important to me?*”, „*How does what I do, think and decide on reflect my using this value in my life?*”).

Conclusion

Self-management is important, even fundamental for management sciences. The indications formulated by authors who deal with this problem can be treated by managers as a base of useful knowledge about skills that allow for a harmonious development of personality in work relations. They can treat it as a useful support which allows to actively overcome fears and resistance to change and introduces knowledge of self-management into their own lives. Using the coach's support and various coaching techniques helps the manager:

1. get used to the change,
2. learn the mechanisms responsible for functioning,
3. develop personal resources,
4. create the mission in his or her own life,
5. develop proactive attitudes in order to achieve the goals which are important both to him or her and the organization.

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III. CHALLENGES OF PRESENT LABOUR MARKET

ENTREPRENEURSHIP AND BUSINESS ACTIVITY OF POLISH STUDENTS

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Abstract: The purpose of the paper is to diagnose the activity and entrepreneurship amongst Polish students. The concept of entrepreneurship will be used as an element of the economic awareness. The analysis will be carried out on the basis of empirical research conducted within the framework of the Visegrad Grant: "The economic awareness of the young generation of Visegrad countries". The paper will present the activity and entrepreneurship the Poles students towards the discussed issue, in comparison with students of other Visegrad Group countries. Similarities and differences will be presented. Types of students will be constructed, depending on their activity and entrepreneurship.

Key words: entrepreneurship, business activity, Polish students.

Introduction

A popular view increasingly promoted these days is that economic development depends, to an ever-growing degree, on the human capital. This is because the economic life blends with the social life. The economy (the market) is integrally connected with the society and its culture (Stough 2016). The institutional space is a bridge between the realm of economic and social phenomena. The activities of social actors are permeated with the rules of the so-called culturally limited rationality. Therefore, it is the cultural values that become the driving force behind human activities (Stough 2016; Linan, Fernandez-Serrano 2014). An essential role in diagnosing this process is played by sociological research exploring one of the components of economic awareness, namely activity and entrepreneurship. This is particularly true for the young generation who are usually the pioneers of social changes. The purpose of the paper is to:

1. Diagnose the activity and entrepreneurship of the young Polish generation (students). A comparison will be made with students from the remaining V4 countries.
2. Construct various types of students, depending on their activity and entrepreneurship.

Business activity and entrepreneurship as an element of the economic awareness - theoretical analysis

Searching for the links between humans and the functioning of the economy is one of the basic research problems undertaken by social sciences. Until recently, experts

claimed that the economy functions on the basis of three production factors, namely work, land (natural resources) and capital. However, a significant role is played by the human capital with its economic awareness. It concerned all elements of economic consciousness: knowledge, value system and economic aspirations, work and entrepreneurship, the attitude towards wealth and poverty, attitude towards money and thriftiness, and consumption (Swadźba 2017, p. 870). It is assumed that economic awareness includes value systems, cognitive schemes and behavioural patterns which are related to management (Ireland, Tihanyi, Webb 2008; Swadźba 2017, p. 870). This definition also encompasses entrepreneurship as one of the components of the economic culture (1992, Swadźba 2017, p. 870). Self-employment and running a business are not fully used as tools for boosting economic growth and creating new jobs (Druker 1992; Marody, Kochanowicz 2007; Rantanen, Toikko 2017).

The classical theory of entrepreneurship was developed and consolidated in the literature by J. Schumpeter, who perceived an entrepreneur as a person characterised by innovative activity to pursue new concepts (Schumpeter 1962). These include anticipation, moderate tendency to take risks, flexibility, creativity, independence, problem-solving abilities, the drive to achieve, leadership and the ability to work hard (Piecuch 2010, p. 39; Linan, Fernandez-Serrano 2014). Our understanding of entrepreneurship also encompasses all measures taken to achieve a better position in life, such as raising one's qualifications, labour migrations within the country and abroad (permanent or seasonal), as well as all other activities aimed at finding a better job (Swadźba 2017, p. 872). This article will primarily focus on the propensities for activity and entrepreneurship as well as on the plans to set up one's own business.

Methodological part of the research

The empirical analysis is based on the research was conducted in April–May 2015 and November 2016, in four V4 countries – Katowice, Poland (University of Economics in Katowice, University of Silesia in Katowice and Silesian University of Technology), Olomouc and Ostrava, Czech Republic (Palacky University in Olomouc, University of Ostrava and Technical University of Ostrava), Nitra, Slovakia (Constantine the Philosopher University in Nitra and Slovak University of Agriculture in Nitra), Godollo, Hungary (Szent Istvan University in Godollo). The empirical analysis is part of the Visegrad Standard Grant: “The economic awareness of the young generation of Visegrad countries” no. 21420008 (2015-2016).

Firstly, a common questionnaire survey was prepared in English and then it was translated into national languages. The questionnaire included 37 extended questions (all elements economic awareness) and 10 about socio-demographic characteristics.

In every country groups of students were selected to take part in the research using an auditor survey technique. The research was based on first and second level students from four different types of studies: economics and management, technical, sciences or medical, social studies, humanities. In Poland 400 surveys were conducted, in the Czech Republic 400, in Slovakia 387, in Hungary 368. Jointly 1555 surveys from four V4 countries were conducted and directed for further analysis. The collected large

empirical material. It was encoded and statistically analyzed using the SPSS program. Four statistical bases have emerged for further analysis: Polish, Czechs, Slovakian and Hungarian.

The article will focus only on answers to questions about the entrepreneurship of Polish students. The analysis has been answered in two questions:

First question: "Please indicate which of the following statements best characterises you." The statements presented above can be divided into two groups. Choosing one of the first five (S.1. When I plan something, I usually manage to materialize, S.2. I can achieve whatever I want in life, if I work on it, S.3. I am not afraid of new challenges in life, S.4. I am not afraid of risk if I have a goal to reach, S. 5. I believe that my future depends on me) indicates activity and entrepreneurship, while choosing statements from 6 to 9 demonstrates passivity (S.6. If I fail, I don't make further attempts to achieve my goals, S.7. I avoid difficult situations, even if it means that I will achieve less, S.8. I often start something, but then feel discouraged and give up, S.9. I believe that in difficult situations, I am entitled to help from the state). The students were requested to choose 3.

The second question: Do you take into account the possibility of setting up or running your own business? Select one option: (S.1. I already own (co-own) a private company, S. 2. I want to soon start my own company, S.3. I'm thinking of starting my own business in the future, S.4. I have thought about it, but have not decided, S. 5. I do not take this into account in my plans for life, S. 6. I had my own company and do not intend to assume the next, S. 7. Hard to say).

The results will be presented in the tables (in percentage data) and correlations with Chi-square and Cramer's V. On the Polish research conducted in three Katowice-based universities, namely the University of Silesia, the Silesian University of Technology and the University of Economics. The respondents included 45% of men and 55% of women, who studied at four faculties, namely polytechnic, economics, social and arts/humanistic (approximately 25% each).

Assessment of the conditions for entrepreneurship in Poland

As a rule, each activity is dependent on two factors – external and internal. The same applies to entrepreneurship and business activity. It is the state, through its legal system, that creates the conditions for entrepreneurship and business activities, making them easier or more difficult. How are these conditions evaluated by young people? Responding to the question concerning the opinion on the conditions for entrepreneurship in Poland, a small proportion of the respondents rated the conditions for the development of entrepreneurship as "definitely good" (1.3%) and approximately 1/3 of them as "rather good" (32.3%). Similar results were obtained from the surveys carried out in Silesia on a sample of adults ("rather bad" – 34.5%; "definitely bad" – 13.3%) (Swadźba 2015, p. 644). The Polish students, on the other hand, are more optimistic than the other students of the V4 countries when it comes to assessing the involvement in business activity in their country. A "rather bad" and "definitely bad" rating is given by 52.5% of the Polish students, and by as many as

78.8% of the Slovakian students, 65.6% of the Hungarian students, and 56.0% of the Czech students (Dunay, Illes, Vinogradov, 2017, p. 123). The students do not have a positive opinion about the conditions for entrepreneurship in their countries. However, one may be tempted to think that the more positive assessment expressed by the Polish students is a reflection of the real situation in Poland.

Can students accurately assess the conditions for entrepreneurship, without being experts in most cases? After analysing the responses by the students based on the faculty studied, it appears that the least critical assessment of the conditions for entrepreneurship is given by the students of economics and management (38.3% – “rather good” and 10.3% – “definitely bad”), i.e. the faculties that convey specific economic knowledge. The most critical opinions are expressed by the students of humanities (22.1% – “rather good”) and social sciences (18.5% – “definitely bad”). Similar results were obtained by the Author of the research in the Silesian community when she compared the responses by entrepreneurs with those given by other respondents. The opinion of the entrepreneurs concerning the conditions for entrepreneurship and business activities was slightly better than that of all other respondents (Swadźba 2015, p. 665). It turns out that individuals with knowledge about the economy or conducting business activities give higher assessments in this regard than other respondents. It can be presumed that the opinions of the latter are influenced by the media that usually provide us with negative facts.

Students about their own activity and entrepreneurship

Economic development depends not only on the technological progress but, above all, on the activity and entrepreneurship of community members. Therefore, sociological research is aimed at answering whether specific social categories or entire communities show enterprising attitudes. The following question was used in the students’ survey: “Please indicate which of the following statements best characterises you”. The students were requested to choose 3 out of 9 possibilities. The table below shows the responses to this question.

The statements presented above can be divided into two groups. Choosing one of the first five (1-5) indicates activity and entrepreneurship, while choosing statements from 6 to 9 demonstrates passivity. The majority of the students chose one of the five possibilities that indicate an active and enterprising attitude in life (235.3% of the choices, which is equal to 78.4% of the choices out of the total of 300).

Such a high percentage of enterprising young people augur well for economic development. The choice of statements from 6 to 9 indicates a lack of activity and entrepreneurship amongst the students (64.8% of the choices out of the total of 300, which amounts to 21.6%). The most frequently selected option was “I often start something, but then feel discouraged and give up” (28.7% of the choices). This would suggest that there is a considerable group of students who get easily discouraged from effort and activity. Interestingly, similar responses were obtained by the Author also in the previous research (18.2%, when there was only one response option) (Swadźba 2015, p. 647; Swadźba, Cekiera 2016, p. 107). The young respondents are, thus, very

polarised in their attitudes. On the one hand, there is a group of enterprising and success-oriented young people while, on the other, there is also a group of passive individuals.

Table 1. Please indicate which of the following statements best characterises you. Select 3 options: N = 400

Answers:	Field of study				Total
	Polytechnic	Economic	Social	Arts/ Humanistic	
S.1. When I plan something, I usually manage to materialize	47.5	46.7	40.7	41.9	44.3
S.2. I can achieve whatever I want in life, if I work on it	61.6	57.0	73.1	64.0	64.0
S.3. I am not afraid of new challenges in life	29.3	30.8	23.1	30.2	28.2
S.4. I am not afraid of risk if I have a goal to reach	31.0	28.0	25.0	26.7	29.0
S. 5. I believe that my future depends on me	62.6	68.2	75.0	70.9	69.3
S.6. If I fail, I don't make further attempts to achieve my goals	5.1	0.0	4.6	9.3	4.5
S.7. I avoid difficult situations, even if it means that I will achieve less	18.2	18.7	17.6	16.3	17.8
S.8. I often start something, but then feel discouraged and give up.	24.2	30.8	29.6	30.2	28.7
S.9. I believe that in difficult situations, I am entitled to help from the state	13.1	19.6	11.1	10.5	13.8

Explanations: The students could choose 3 answers. Theoretically there can be 300 choices for answers. Not all of the students used it, so the sum of answers in the particular countries is different

Source: Team research, own calculation

What were the responses of students from the V4 countries? The greatest similarity to Poles in terms of opinions was exhibited by the Hungarian students (statement no. 5 – 69.9%, statement no. 2 – 60.2%), and slight similarity by the Czech students (S. 5. – 63.5%, S.2. – 52.6%) (Horakova, Jaluvkova 2018, p. 52). Compared to the students from the other countries, the Polish students appear to be the most active and enterprising. Such conclusions could also be reached during the analysis of the research conducted in the worker communities of Silesia. The educated young

generation in worker communities have an optimistic opinion of their potential to succeed, seeing their own activity and entrepreneurship as an opportunity for professional development (Swadźba 2015; Swadźba, Cekiera 2016).

Do the students' sex and the faculty studied have any influence on their attitudes towards activity and entrepreneurship? In principle, male and female students do not differ in terms of their active attitudes. There is no such statistical relationship except for one statement, namely "I am not afraid of risk if I have a goal to reach" (at the level of $p = 0.009$, the chi-squared test – significant, Cramer's V 0.131). This statement was supported by 35.6% of the male students and only 23.6% of the female students. The male students are, thus, more ready to take risks than their female counterparts. Such a situation is not surprising, taking into account that it is the young men who have always been more inclined to risky behaviours.

Conducting the research on business activity and entrepreneurship, we also asked a question about the respondents' assessment of their propensity to run their own business. The students' responses indicate that nearly half of them are convinced of their skills and abilities to run their own business ("definitely good" – 6.3%, "rather good" – 39.8%). These percentage values are significantly higher than those in the previous research (Swadźba 2015, p. 649). Particular confidence in their skills was demonstrated by men ("definitely good": $M = 8.9\%$, $F = 4.1\%$). Women were more common to doubt their skills ("hard to say": $M = 14.4\%$, $F = 20.5\%$). Such relationships partially translate into the confidence of one's skills versus the faculty studied. The highest level of confidence was exhibited by the students of polytechnic faculties ("definitely good" – 8.1%, "rather good" – 35.4%). These faculties are attended by a considerable proportion of men and hence the higher proportion of positive responses. The students of economics have the lowest opinion of their propensities ("definitely good" – 4.7%, "rather good" – 39.3%), with a high percentage of them being indecisive ("hard to say" – 24.3%). However, interestingly enough, quite high scores are achieved by the students of humanistic faculties ("definitely good" – 7.0%, "rather good" – 45.3%), which are dominated by women. Such disproportions can be accounted for by the fact that students with knowledge of economics and market mechanisms assess their skills in a more realistic way than those without such knowledge. What is particularly surprising is the optimism amongst the students of humanistic faculties, who have a very high opinion of themselves.

Let us examine, however, what these results look like when compared with the responses given by the students from the other V4 countries (Dunay, Illes, Vinogradov 2018: 130). This comparison is not advantageous for our students ("definitely good": $Cz = 11.3\%$, $S = 27.1\%$, $H = 14.6\%$; "rather good": $Cz = 45.0\%$, $S = 47.3\%$, $H = 53.1\%$). An explanation for such a difference in the attitudes of the students from the V4 countries could be their perception of the real possibilities for running a business activity. In Poland and the Czech Republic, where the conditions for starting one's own business are perceived to be more favourable and feasible, the students do not overestimate their skills. In Hungary, and particularly in Slovakia, the assessment of one's own skills in less favourable conditions is higher.

Is running one's own business attractive?

The propensity for business activity does not always translate into running one's own business. Besides a favourable external environment, it is necessary to have a business idea, knowledge about the market and the existing loopholes, one's own resources, determination and courage. Sociological research often shows how professional aspirations differ from the realities on the labour market market (Elenurm 2008; Boguszewski 2013; Linan, Fernandez-Serrano 2014; Papadaki, Novak, Dvorsky 2017). Therefore, in an attempt to find out whether self-employment and business activity were only a dream or a concrete plan, a question was asked about life plans that take self-employment into consideration. Below, there are responses to the second question in correlation with the faculty studied.

Table 2. Do you take into account the possibility of setting up or running your own business? Select one option: (%) **N=400**

Answers:	Field of study				Total
	Polytechnic	Economic	Social	Arts/ Humanistic	
I already own (co-own) a private company	2.0	2.8	0.9	0.0	1.5
I want to soon start my own company	3.0	0.0	6.5	7.0	4.0
I'm thinking of starting my own business in the future	47.5	50.5	36.1	39.5	43.5
I have thought about it, but have not decided	21.2	19.6	18.5	22.1	20.3
I do not take this into account in my plans for life	3.0	4.7	20.4	15.1	10.8
I had my own company and do not intend to assume the next	5.1	2.8	1.9	1.2	2.8
Hard to say	18.2	19.6	15.7	15.1	17.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Team research, own calculation

The research results indicate that nearly half of the students (49.0%) are considering starting their own business (point 2 + 3). This is a high percentage that demonstrates young people's activity and entrepreneurship. Compared to the previous research conducted on adult respondents from a workers' district in Silesia, this percentage is twice as high (28.6%) (Swadźba 2015: 650, Swadźba, Cekiera 2016: 101). Are the plans of the Polish students identical to those of their colleagues from

the remaining V4 countries? A comparison of the responses by the Polish students and the responses given by their counterparts from the other countries demonstrates that the former are the pioneers of entrepreneurship (Dunay, Illes, Vinogradov 2018, p. 126). The Polish students are more willing to invest in their own future by starting their own business than to rely on a career in private or state-owned enterprises and institutions. This might also be the effect of the moderately positive assessment of the possibilities for economic activities. Coming back to the analysis of the activity and entrepreneurship of the Polish students, a question can be asked whether there are any relationships and correlations in the plans for starting their own businesses. The correlation of this question with the faculties studied demonstrates statistical significance (at the level of $p = 0.003$, the chi-squared test – significant, Cramer's V 0.179). Following the percentage distribution of the responses selected, it can be concluded that the students of economic and polytechnic faculties are more likely to choose S.3 than their counterparts from social and humanistic faculties. Such a relationship probably results from the nature of the studies chosen (Papadaki, Novak, Dvorsky 2017). The students of polytechnic and economic faculties are more likely to possess qualifications that can be used in their own businesses (e.g. construction, logistics and architecture engineers). On the other hand, the students of social and humanistic faculties are more often equipped with qualifications that allow them to take up employment in the public sector in offices and other state institutions (e.g. teachers).

Lastly, consideration should be given to whether the plans to start one's own business coincide with the positive assessment of one's own propensity to run such business. The correlation between the two questions is statistically significant (at the level of $p = 0.000$, the chi-squared test – significant, Cramer's V 0.277). As many as 48.0% of the students who have a definitely positive opinion of their propensity to run their own business are contemplating starting their own company, while amongst the respondents choosing the "rather yes" option, this percentage value is nearly 60% (57.9%). Active, enterprising students plan to take control of their lives and embark on a professional career based on their own business by starting their own company. This is a good sign not only for the career of the individual people and their families, but also for the development of a given region and country, because it must be based on the active, enterprising young generation.

Conclusion

The activity and entrepreneurship of the particular individuals translates into the activity and entrepreneurship of entire groups, regions, and then nations. A pivotal role in this phenomenon is played by the young generation who are starting their professional life. A sociological analysis of the empirical material from the research made it possible to identify the following types of students:

Active realists. These are mostly students of economics and, sometimes, of polytechnic faculties. They know how the market functions and are able to realistically assess their propensity for business activity. They have family traditions

of economic activity and plan to set up their own company. This is the most promising group that will be the pioneers of future changes.

Moderate realists. These are mostly students of social and humanistic faculties who do not have extensive knowledge on the economy. In their opinion, they have no propensity for starting their own business. This is partly due to the fact that their professional activity is oriented towards public institutions or companies as they possess relevant qualifications. They do not intend to start their own business. This is a group of students who will surely find their bearings on the labour market as good employees, yet without demonstrating any leadership potential.

Active dreamers. These are mostly students of humanistic and social faculties who have no economic knowledge about the market realities. They demonstrate active and enterprising attitude to life and think highly of their propensity to start their own business. However, their dreams are not backed by concrete plans or actions in the future, because they do not declare the will to start their own business.

Passive realists. Students of all faculties, with a smaller number of those from economics. They neither have sufficient economic knowledge about the market realities nor show any activity or entrepreneurship. They often declare that they give up on their goals if something goes wrong. In difficult situations, they even expect to receive state aid. They do not intend to start their own business. This is a group of students who will, in all likelihood, remain passive employees directed by others.

The economic development of societies is conditioned not only by legal, political, technological and financial aspects, but also by the actions, activities and entrepreneurship of individuals, specially students (Papadaki, Novak, Dvorsky 2017).. The research demonstrated that a great potential lies in the young Polish generation. They have been socialised in a free market environment and see own business as one of the possible career paths. As shown by the analysis, they not merely want it but have concrete plans that will be put into action.

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EXPECTATIONS AND PREFERENCES OF EMPLOYEES FROM GENERATION Y RELATED TO RELATIONSHIPS WITH THEIR SUPERIORS

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Abstract: In the presented study, the attention was paid to the relationships between employees from generation Y and their superiors. The aim of the article is to identify the expectations and preferences of employees from generation Y regarding relationships with superiors and to indicate the possible use by managers of main factors influencing the formation of positive relationships with the subordinates. In the light of this issue, reference was made to the subject literature and the results of research and reports illustrating the expectations of Y generation representatives regarding work and especially relations with their superiors. The research part of the study presents the results of group interviews with working people from the Y generation. The group focused interviews were aimed at analyzing the opinions of the respondents on the factors affecting the functioning of employees from generation Y in the workplace, including their relations with superiors.

Key words: generation Y, human resource management, management of relationships with employees

Introduction

The contemporary labor market is affected by demographic and generational changes, which are also an important determinant of human resource management. The generations operating on the labor market have different expectations towards work and employers and a different approach to their professional career (Kroenke, 2015, pp. 91-103). Therefore, employers who want to make the best use of the potential inherent in the knowledge and skills of employed staff, must be aware of the generational diversity of employees should be translated into the diversification of approaches and activities that take into account the diverse expectations of employees (Robak, Albrychiewicz-Słocińska 2017, pp. 393-416). Notably, the expectations of employees from generation Y regarding work in the workplace and relations with superiors cause that cooperation with these young people being often perceived as very demanding and challenging for the managers of contemporary organizations. Contemporary managers are responsible, on the one hand, for recognizing the needs of employees, and on the other, for shaping relationships with subordinates, so that they have a positive impact on their organizational commitment.

The aim of the article is to identify the expectations and preferences of employees from generation Y regarding relationships with superiors and to indicate the possible use by managers of main factors influencing the formation of positive relationships with the subordinates. The structure of the study was subordinated to formulated goal.

The first part presents selected results of research and reports devoted to employees from the generation Y and, in particular, their relationships with superiors. The second part shows the results of own research on this topic. The issues discussed in the group interviews referred, among other things, to the search for answers to the issue relevant to this study: what superiors do the generation Y employees prefer and what kind of relationships they expect from the workplace?

The relationships between employees from generation Y and their superiors in the light of research studies and reports

Particular attention in the analysis of modern labor resources is given to the Y generation (also referred to as Millennials), which most often includes people born from the early 1980s to the mid-1990s. Employers can no longer count on the loyalty and commitment of the representatives of this generation, as in the case of previous generations, because they display different values and work in a different style (Sharkawi, Mohamad, Roslin 2016, pp.192-202; Robak 2017a, pp. 441-449; Šafránková, Šikýř 2017, pp. 595-609). Ys, although, want professional development, they want to achieve it while maintaining a balance between work and personal life (Robak 2017b, pp. 579-594). Accustomed to frequent changes, they do not hesitate in changing their employer. It is difficult to comply with organizational procedures and rules, value work comfort, and thanks to education and foreign language skills are more mobile on the labor market.

The issues concerning the functioning of the generation Y in the work environment, including the specificity of the relationships between these young employees and their superiors, have been the subject of many Polish and foreign research studies (see Maxwell, Broadbridge 2017) as well as international comparative studies.

Particularly noteworthy are the results of cyclical research by the Deloitte company conducted in 14 Central European countries among several thousand people from the generation Y. According to these international comparative studies, representatives of Millennials from Poland, more often than other respondents, expected following things from their future bosses: strategic thinking, charisma and inspiration, influencing the development of employees, inter-personal skills, however, less of them expected advanced technical skills, vision and ethics in business. In their opinion, the leader should focus on employee development, inspire and make hard decisions, but in an atmosphere of dialogue with employees, and be a person supporting new, innovative ideas allowing to create a new product, or a service. A similar opinion on this issue was also given by respondents from other countries (First Steps into the Labour Market 2015, pp. 98-99). In the report from 2018 the respondents indicated that their involvement in work is influenced by the recognition of colleagues and the possibility of using new technologies. What is important, for young Poles, a stress limiting environment is an important factor of professional functioning, because they believe that they cannot cope with stress (only 33% of them declared resistance to stress). On the other hand, the respondents stated that they have high information

analysis and learning skills (65%), the ability to learn new issues (63%), communicative (59%), and effectively work in a team (59%). At the same time, only 41% of them were able to cope with conflict situations. The weaknesses of Millennials were leadership (37%) and delegation and management of the work of others (40%) (First Steps into the Labour Market 2018, pp.120-125).

Another source of information regarding the analyzed subject matter are studies conducted by M. Kaczkowska-Serafińska (2017). They present similarities and differences between representatives of the Y generation in Poland and Italy in the perception of: the characteristics of dream work, relations with the immediate superior and motivational factors. According to these surveys, both Polish and Italian respondents expect the immediate supervisor to be sensitive to their professional needs, listen to, consider and discuss employee ideas, and treat them with the courtesy and respect. Importantly, the Poles expected from their superior that he/she would solve their problems and help overcome the emerging obstacles to the implementation of tasks, while the Italians emphasized the treatment of employees with courtesy and respect, and the quality and results of the tasks performed by them. The author, analyzing factors motivating the representatives of the generation Y, states that for both Polish and Italian Millennials the most important is job satisfaction, salary received, the possibility of career advancement and balance between personal and professional life. At the same time, respondents from Poland emphasized the importance of a good atmosphere at work, while respondents from Italy - the opportunity to pursue their own ideas and initiatives (Kaczkowska-Serafińska 2017, pp. 244-247).

Among the research analyzes devoted to the Polish generation Y, important messages include the results of research carried out by S. Stachowska (2012). The generation Y representatives surveyed declared that they expect from the future boss primarily open and honest communication and a fair and objective evaluation of their work. It was also important for them that the boss would set an example for others, be respectable and trustworthy, clearly define the tasks, and help and support their implementation. Respondents asked about the preferred model of the boss were in favor of the supervisor, who can appropriately motivate, at the same time setting a certain limit in relations with subordinates, and also able to maintain cordial contacts while enjoying the authority in the team under his/her command. Young people were definitely not satisfied with the traditionally understood model of the superior who gives orders, controls their performance and follows the principle of subordination (Stachowska 2012, pp. 47-48).

Expectations of Polish workers from generation Y towards employers and superiors were also the subject of M.W. Kopertyńska and K. Kmiotek (2014) research. The results of surveys carried out by these researchers indicate that the expectations of employees from generation Y towards superiors focus mainly on motivational aspects. According to the respondents, the supervisor should: appreciate the employee's contribution to the achievement of goals, support him/her in innovative ideas, motivate to development and creativity, and openly and often inform about the results

of the work. In addition, the manager should base his/her authority on knowledge, professionalism and leadership (Kopertyńska, Kmiotek 2014, pp. 190-195).

However, in order to better understand the expectations of these young employees one should also refer to the managers' opinions on cooperation with subordinates from the Y generation. The results of research available on this subject indicate that in managers' opinion employees of this generation expect development support in the form of mentoring and coaching combined with regular feedback. In the opinion of managers, lack of sufficient appreciation of the work of these young people, unsatisfactory development opportunities as well as negative relations in the work environment are the most common reason for their leaving the company (Global Human Capital Trends 2014, pp.75-82; Trendy HR 2017, pp. 81-82). According to the superiors of Millennials, their weaknesses include not only lack of professional experience, ignorance of the industry, lack of passion and initiative, low interpersonal skills, insufficient independent thinking, low creativity, low ability to solve unusual problems, low discipline, inaccuracy and insufficient personal culture (Jurek 2014, pp. 127-139).

Taking into account presented the characteristics of the representatives of the Y generation, it should be noted that organizational solutions that work in the case of previous generations may become insufficient to stop and involve the young employees in terms of organization. The key tasks of contemporary managers should also include skillful shaping of positive relations with people from the Y generation.

Methodology of the research

The shown results of the research and reports, presenting the image of the generation Y, indicate many similarities in the description of the expectations of these young people regarding the work and the needs related to relations with superiors. With reference to the provided information about the functioning of the generation Y representatives in their work environment and the expectations expressed by them in this area, the author carried out her own research.

The conducted group focused interviews gathered opinions of employees from generation Y on factors affecting their functioning in the workplace, including their expectations and preferences regarding relationships with superiors. The analyzed research material was acquired in October 2017. Five group focused interviews were conducted, in which a total of 38 people participated. There were 11 women and 27 men between 23 and 28 years of age. A common feature of all interviewees was employment in enterprises operating in the silesian voivodeship and the fact that they were students of the last year of full-time and part-time second-cycle studies in such fields as: computer science, mathematics, mechanics and machine building, and management.

The issues discussed in the group interviews referred, among other things, to the search for answers to the issue relevant to this study: What superiors do the Y generation employees prefer and what kind of relationships they expect at the workplace? Therefore, the study presents the following research questions:

- What are the expectations of generation Y to their superiors?

- What supervisor's competences related to communication with subordinates are particularly valuable in the opinion of employees from the generation Y?
- What kind of relations would generation Y employees have with their supervisors?
- What characteristics / behaviors of the manager are disturbing in building good cooperation for the employees of generation Y?
- What supervisor's actions are conducive to building good relations in the team?

Relationships of employees from generation Y with superiors - results of own research

According to interviews, representatives of generation Y expect from their superiors mainly activities related to building good relations in the team of employees and shaping a friendly working atmosphere. It was also important for the respondents that the supervisor would be a professional in his/her work, and would be willing to share his/her knowledge with subordinates. The following kinds of importance was also emphasized: leadership skills, competence in motivating and stimulating employees to develop and creativity, as well as strategic thinking abilities.

The competence of the superior regarding communication with subordinates was considered particularly valuable in the opinion of employees from generation Y. The respondents emphasized the importance of open and honest communication with the boss. From their superior they expected a clear and precise instructions and frequent and unambiguous information about the results of their work, as well as the ability to listen to colleagues and receive constructive criticism. A good supervisor should, above all, be available and open to interviews with subordinates and often provide them with feedback. Moreover, according to the interviewees, it is important to communicate with young employees not only to use professional vocabulary, but also to use the language characteristic for the recipients and appropriate channels and communication tools.

Respondents in response to the key questions for the subject matter, what relations they would like to have with their superiors, first of all pointed to the importance of the feeling that they are appreciated for the contribution put into the tasks performed and treated with courtesy and respect. As subordinates, they want their suggestions and ideas to be acknowledged, and at the same time they are motivated to develop properly and evaluated fairly. Moreover, the expectations of support in performing professional tasks, as well as understanding in difficult life situations, showing trust, understanding and empathy, are often considered.

Respondents described these relations as: open, conflict free, equal for everyone (without favoring selected people), helpful. The following statements appeared among the respondents' opinions on this subject.

"Relations with your superiors should be unproblematic. It will be good, if he was understanding, helpful and open to the ideas of subordinates. He should not exalt himself, but always help employees to solve problems."

"Relations with the boss should be professional, but friendly."

"An employee with a superior should be connected by business relations allowing for specific conversations about salary and form of cooperation. "

"The employee should be able to present his ideas to the superior, enter into a discussion with him and not just receive his instructions. "

The surveyed representatives of the generation Y therefore depend not only on treating the superiors with respect, but above all on feeling their own subjectivity and significance at work by emphasizing the work they have put in and appreciating ideas. What is crucial, they want their boss to be supportive, understanding and trustworthy guardian.

The respondents, sharing their remarks about the supervisor's characteristics or behaviors that would prevent them from building good cooperation, indicated many factors, such as:

- disrespect for subordinates, objectification;
- arrogance towards subordinates, exaltation, being "always right", excessive power demonstration;
- introducing an atmosphere of fear, groundless criticism of employees;
- lack of understanding for mistakes of subordinates and lack of willingness to help them;
- lack of time for subordinates, limited contacts, lack of interest in their problems;
- lack of professionalism, of decision-making, excessive control of employees, favoring selected people;
- conservatism of the supervisor manifested by excessive attachment to organizational rules related to the formalization of dress code, ban on food / beverages at work, etc.;
- nervousness, anger, gruffness, generally negative attitude towards people;
- lack of praise for a job well done, lack of trust in subordinates.

On the other hand, employees from Generation Y asked what attitudes and actions of the supervisor are conducive to building good relations in the team of employees, they named mainly:

- openness to employees and helping them when needed;
- friendly and supportive approach to all team members and fair treatment;
- common implementation of tasks with subordinates and listening to their opinions and ideas during work and at meetings;
- organization of meetings during which objectives are presented and discussed, but also current problems are solved;
- supervisor's initiatives that support building good relations between employees, and a friendly work atmosphere as well as limiting rivalry in favour of cooperation, as well as identifying and resolving conflicts;
- shaping good communication and strengthening mutual trust.

Summing-up, relations with the superior in the opinion of the respondents were crucial, not only in the aspect of work efficiency, but above all, as the main factor determining the working atmosphere. Main expectations of the surveyed employees from generation Y regarding relations with their superiors focused on: having the

opportunity to present their suggestions and ideas, mutual respect and trust, and help and support from the manager.

The information obtained from the conducted interviews correspond with the results of research analyzes and reports published in the literature, which builds a coherent picture of the Millennials' needs in shaping relationships in the work environment.

Summary

The conducted research indicate important issues regarding the expectations of the generation Y representatives related to relations with superiors. According to the respondents, the supervisor should not only be known for his/her professionalism and experience, which he/she shares with subordinates, but above all, understanding, helpful attitude, and what is especially important, good communication skills. In addition, in relations with subordinates, he/she should be open to their ideas, count on their opinion and show confidence, and also apply an individual approach to employees by assigning them ambitious and varied tasks and take care of their developmental needs. Respondents are interested in such a work environment in which they will feel appreciated and have a sense of influence on the ongoing changes.

In conclusion to the presented research, it is necessary to emphasize the key importance of social competence of superiors. Very important in shaping relationships with the Millennials are the skills of active listening, expressing constructive criticism, as well as empathy and building a cooperation based on trust. Indispensable are the skills to appreciate subordinates and build their sense of importance in achieving organizational goals. Acquiring authority by the superiors and building an atmosphere of cooperation in the subordinate team, based on trust and respect in mutual contacts, seem to be the key to keeping and involvement of generation Y workers.

Considering the conditions of effective utilization of the potential inherent in employees from generation Y, despite numerous publications, there are still many questions, which can become an inspiration for further discussions and research in this important area of human resource management. Answers to these questions are extremely important considering the problems that employers have with commitment to work and often also with making the generation Y employees stay.

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REVOLUTION IN THE LABOUR MARKET AS A CHALLENGE FOR THE POLISH FREELANCER

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Abstract: In the last few years new trends have appeared in the labour market, which are aimed to tighten up the market and introduce alternative forms of employing and engaging employees, e.g. contracting or temporary work. More and more often the lack of permanent employment is the effect of the employee's own decision. The aim of this article is to present freelancing, a work model, allowing a person to freely decide on implemented projects, working hours as well as remuneration. This is called a phenomenon of "uberisation" of the labour market and sharing economy, called "freelance economy", which is a situation in which full-time work is supplanted by flexible forms of employment. This article is of a theoretical and empirical nature.

Key words: freelancing, labour market, flexible forms of employment, recruitment, contracting

Introduction

The purpose of the article is to present the subject of organizational flexibility in the area of employing human capital with particular emphasis on freelancing, a modern work model that begins to dominate the employee market, which is connected with to the decentralization of the Polish labor market. It is a fragment of a wider elaboration. "Economy 4.0 means not only the need to educate professionals, but also the need for new professions as well as redefinition of the labor market and changing the rules that prevail on it. The answer to the needs of the labor market and finding appropriate employees are becoming a problem, which is the reason why companies use more and more new and complex methods of personnel selection for the organization. The demand on the labor market is created by the organizations which determine the necessary to achieve the company's established objectives from the point of view of desired qualifications, whereas the supply on the labor market is determined by social, demographic, geographical, educational factors as well as competence profiles and the specificity of the labor market" (Przewoźna-Krzemińska, 2017, p. 126).

"The phenomenon of freelancing is sometimes defined as the economics of cooperation or economics on demand. The article will include a literature review, methodological verification of the results of the report commissioned by the Polish remote work platform Usume.eu, based on which an attempt to answer the question whether this work model has an impact on the organization's effectiveness and the freelancers' commitment and worthy wages has been made. The research sample was 723 people, the method of an anonymous questionnaire was used, in which, among

others, questions regarding freelancers' internship, trade, ways of obtaining contracts, earnings, combining remote work with full-time work, legal form were asked. It is worth emphasizing that freelancing is a kind of career without a long-term commitment to one employer (<https://www.merriam-webster....>). Popularization of remote work is intensified by the development of no-office solutions, in which companies start to base their structures on remote work and hired employees, appropriate to the actions taken.

The history of freelancing

The term *freelancer* has been used more and more often in recent years, however, this model of work has not been researched in too many literature studies. In the United States, this phenomenon has been known for a long time, while in Poland in the last ten years this form of providing services has been gaining popularity on the labor market. Polish Dictionary defines a freelancer, as a person performing a free profession, working without employment contract, acquiring contracts on internet auctions or carrying out fee-for-task projects (<https://pl.wiktionary.org/w/index.php...>). Such a person is also called a "contractor" or "self-employed person". Freelancers usually perform free professions (usually connected with creative work), among others, they are: copywriters, journalists, photographers, translators, IT specialists, programmers, painters, designers, graphic designers, various types of advisors, consultants of various specialties, actors etc. Freelancers also begin to provide services in such industries as media, finance, public relations or marketing.

The person who used the word freelancer for the first time (in 1820) was the writer Walter Scott, who called freelancer the mercenary, medieval warrior in his novel called "Ivanhoe". He created this term by combining the word free and lance (weapon). At the beginning of the 19th century in England, the term freelancer was used to refer to paid mercenaries who fought for any country or the person who would pay the most (the so-called army of paid warriors or free lances). However, the word got a wider meaning; currently it refers to the definition of independent politicians (without political affiliation, non-affiliated), and above all it describes people, usually self-disciplined specialists, who are self-employed without a permanent commitment to the employer. Classic freelancing was born in the USA as an alternative to a full-time job. Currently, over 10 million Americans provide their services in this form (it is more than 7% of professionally active citizens). Internet, as an available and modern method of communication, has contributed to the development of freelancing. The Internet facilitated contacts, the ability to send different and large data and made it possible to present the demand for various services that freelancers can perform. Work is becoming more and more mobile. Specialized portals allow to connect and communicate potential principals and contractors. This happens increasingly at the expense of full-time employment (<https://businessinsider.com.pl...>). "The discussion has focused primarily on the distinction between those genuinely in business on their own account, employees and employers, rather than between freelancers and other kinds of own-account worker. Freelancers might be defined as a distinct subset of own-account workers on the grounds of skill or occupation. Popular and academic

conceptions of freelancing consider it to be the work of skilled professionals, arguably encompassing creative, managerial, professional, scientific and technical skills and occupations – groups often collectively described as *knowledge workers*” (Kitching, Smallbone, 2012, p. 74).

The proportion of self-employed (people age 15-64) in UE are presented below (Figure 1).

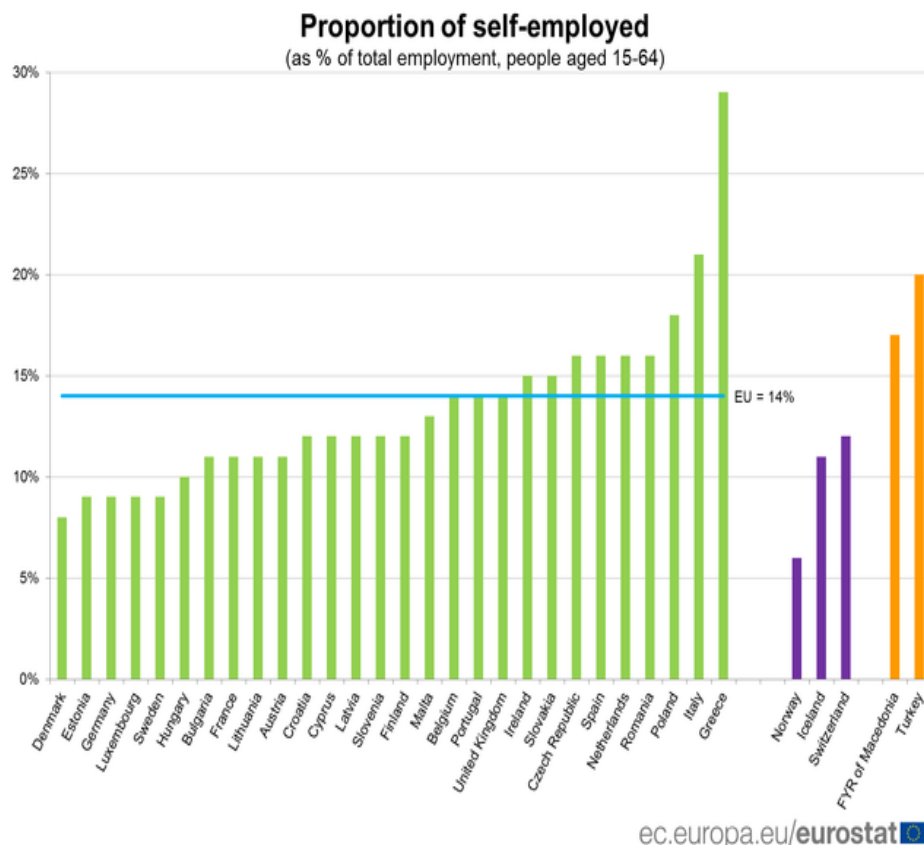


Figure 1. Proportion self-employed in UE

Source: ec.europa.eu/eurostat

“Across the EU Member States, almost one in every three people in employment in Greece was self-employed in 2016 (29%), and around one in five in Italy (21%) and Poland (18%). At the opposite end of the scale, the self-employed accounted for less than 10% of total employment in Denmark (8%), Germany, Estonia, Luxembourg and Sweden (all 9%)” (<http://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20170906-1>). (17.04.2018). International media report that freelancers in the labor market in the European Union are already close to 30%, while American media write that by 2020 freelancers in the USA will account for almost 50% of the market.

Currently, nearly 15 million freelancers work in India alone. Everyone agrees that remote work, work from home is cheaper, less stressful and more beneficial for both the employer and the employee. The Internet has made the labour market unlimited and modern corporations move to the virtual world using specialized platforms. In Poland, the problem is the lack of preparation of labor market for freelancers (<https://wolnizawodowo.pl/rynek-pracy-freelancer>).

This is not exactly a formal type of work. According to the Polish economic law, freelancing is a temporary state between work and employment in a company. Hardly anyone in Poland counts with sole proprietorships because people who are professionally free are forced to many compromises. There is still a problem with the term "freelance" and employees are employed under the contract of mandate, contract for specific work and are not considered to be freelancers. The Freelance Union organization associating freelancers is intended to raise their rank and legal status. In the US, labor market specialists on the basis of research distinguished 5 types of freelancers, which are presented in Table 1.

Table 1. Types of freelancers

Type of freelancer	Characteristics of freelancer's work
Independent contractor	He works under the contract of mandate, he does not have a permanent employer, he works temporarily, he is a full-scale freelancer.
Mixed worker	He has several sources of income, both from traditional work and doing work under the contract of mandate, e.g. a receptionist who drives Uber after work.
Moonlihter (night owl)	During the day he traditionally works full-time and in the evening he performs work under the contract of mandate, e.g. an office worker who designs websites etc. in the evenings.
Freelancer with own business (solopreneur)	He is a freelancer businessman who employs other freelancers helping him or complementing him at work, e.g. a social media specialist, for example running a Facebook page or fan page, employs other specialists under the contract for specific work or mandate, thus creating agencies.
Temporary worker	It is a person cooperating with one employer, client or contractor for a predetermined time; for example, the task is to carry out a project or enter personal data of seasonal workers during holidays.

Source: www.freelancersunion.org (17.04.2018)

Data from the Deutsche Bank report "Free competition in Poland. Portrait of a 2017 professional" show that for the younger generation working as a freelancer is currently preferred model by the employees who value freedom of choice (52%), independence and lack of a superior. For Millennials profit is not the basic motivation (especially for those financially secured by parents). It is important for them to realize their passion, do what they like and choose their preferred lifestyle. Freelancers

usually work with passion, choose a profession that really interests them, a profession that can be continued to develop without necessarily leaving home. Unfortunately, older generations do not value this type of employees, they are of the opinion that such work does not ensure financial continuity because there are periods of continuous orders and periods without orders. Older employees hold the view that only long-term employment in one company provide stability in life, finances and social packages. In 2018 various trends in freelancing began to dominate, e.g. the development of so-called blockchain freelance – connected with cryptocurrencies, digital currencies, therefore the demand for specialists in the architectural industry and blockchain developers increased; the competition has caused that the best freelancers attract customers with low prices and high, professional quality of work; social networks became dominant, and became the basic (working) marketing and advertising tool in the hands of freelancers (<https://medium.com/@lancer.ntwrk/3-trends-of-freelancing-in-2018-8e76a0cd3595>).

Another trend for freelancers has become outsourcing. Organizations analyzing employment costs began to appreciate the employment of external employees due to: financial profit, lower costs of recruitment, selection, employment, and maintenance of internal personnel. Freelancers do not expect social security, health insurance, or pensions, etc. Thanks to the outsourcing of external employees, it is possible to choose the ideal employee/specialist from around the world to carry out a given program. There is a possibility to recruit in this way real talents, which there is no shortage among the freelancers-Millennials nowadays (<https://www.talentlyft.com/en/blog/article/161/7-key-workplace-trends-in-2018>).

Freelancer in Poland

In contrast to the Western European Union countries, freelancer work in Poland is not easy and associated with high risk. Polish employers are more and more willing to employ "freelancers", yet the wages they offer balance on the level of the lowest one, and in exceptional cases of the average national wage. The work of a freelancer, especially a young university graduate, still involves risk, financial support (usually by parents or one's full-time work) and high creativity which is necessary when acquiring contracts. The research conducted by the Useme platform indicates that the typical Polish freelancer is mainly a man (over 56% of respondents) aged 25-34, living in a large city (40.4%), having a Master's degree (including one in engineering) or bachelor's degree. The highest earnings and the most popular industries in which freelancers operate (in services for business) are primarily: the electronic industry (programming and IT 26%, graphics and content creation 36%, copywriting 31%). Earnings in these specialties exceed the amount of 10,000 net. While analyzing reports on earnings from 2016 and 2017, it can be stated that the earning situation of freelancers is gradually improving – they earn between 3,000-5,000 PLN net (9.5% of respondents). The largest group (2/3 of the respondents) are freelancers (with a short seniority) earning only up to 2,000 PLN net monthly, while 14.5% of respondents earns between 2,000-3,000 PLN net.

Just over 8% of respondents earn over 5,000 net PLN. The problem of the Polish freelancer's work is time management, i.e. unlimited working hours. Nearly 60% of respondents work 6 to 10 hours a day, however, for the vast majority (95% of respondents) working hours are flexible, only 5% of respondents report that they work at fixed times.

"Companies are created whose specialty is the association of freelancers and seeking contracts for them. It causes that the Polish labour market and services dynamically develop in this direction"(https://rynekpracy.pl...).

According to the results of research, the source of receiving contracts for Polish freelancers are mainly recommendations, instructions and cooperation with regular clients, and furthermore, the sources are advertising portals (both Polish and foreign) and advertising. On average, a Polish freelancer gains around 5-7 new clients monthly, working for two or three regular customers. They work mainly for small and medium-sized enterprises from Poland, rarely for foreign corporations, unless they are professionals with many years of experience. Nearly 50% of respondents say that they combine full-time jobs with freelance earnings.

The legal form of performing the job (the choice of the type of settlement) by Polish freelancers is very diverse. Nearly 42% of respondents prefer contracts of mandate and task-specific contracts, 23% conduct their own business and do the settlements on their own, while nearly 13% declare settlements "without invoices, bills", illegally. Analyzing respondents' answers, one can summarize that nearly a quarter of freelance settlements are "grey zone", without paying taxes, however 70% of respondents say that there are no problems with payments. It can be concluded that such a situation satisfies both principals and contractors. The advantages and disadvantages of Polish freelancing are presented below (Table 2).

Table 2. Advantages and disadvantages of freelancing in Poland

Advantages of freelancing	Disadvantages of freelancing
<ul style="list-style-type: none"> - flexible working hours, choice of holiday date - choice of the principal or employer, - independence in making decisions, - choice of a civil law contract or own business - possibility of working remotely (from home) or a joint office (co-working), - any amount of time devoted to work, - continuous development (diversity and attractiveness of projects), - possibility of cooperation with contracting companies (assistance in obtaining orders and contracts), - lack of superior. 	<ul style="list-style-type: none"> - lack of good contracts, - artificial underpricing, - low wages, - big competition, - lack of social and health protection, - continuous forcing by the freelancer to: self-discipline, organizing work, time management, development of social competences and interpersonal communication, - continuous acquisition of new clients, - participating in auctions in order to obtain a new project.

Own study based on the report of the Polish remote work platform Useme.eu

Currently, Polish freelancers are representatives of the Y generation, which has been operating on the labor market for several years. However, it often happens that

the jobs that employers offer them are not consistent with the expectations and plans of employees. Therefore, they are looking for alternative forms of earning. The organization of the freelancer's work responds to the key needs of the Y generation. Work in this mode allows for changing the environment and pursuing non-professional passions.

Representatives of the Y generation are flexible, open to change, ready to learn and reluctant to make long-term commitments, This is all related to the need to adapt to the rapidly changing environment (Robak 2017, p.441). "Companies start to fight for employees by building an image of a friendly workplace outside the organization, and some employers are aware that such activities should also be used within the organization and be tailored to its strategy. There are many people who are willing to work, but the qualifications and skills which do not meet the requirements of employers become a problem. And on the other hand, the most active on the labor market is the so-called generation of millennials who is characterized by low loyalty and high requirements. If they have high qualifications and competences, they put conditions, dictate working time, prefer to work remotely." (Przewoźna-Krzemińska 2016, p. 39).

Conclusions

The article presents an analysis of the results of the report of the Polish remote work platform Useme, based on which it can be concluded that organizations are more likely to use independent specialists in order to improve their work efficiency, which is definitely cheaper than employing full-time employees, in particular when it concerns a specific, one-time contract, e.g. narrow specialization in the IT area. The organizations cooperate with contracting companies in order to use the services of a freelancer, they also transfer formalities related to concluding contracts for these companies.

"In 2018, the personality of the freelancer, his image, and not only what he can do, will be even more important than ever before. Why? Because there are more and more freelancers and there is no way to compete with experience (because many people in the industry have similar). You have to be distinguished by personality" (<http://www.wiwar.pl/czy-warto-pracowac-jako-freelancer-zalety-i-wady-bycia-wolnym-strzelcem>).

Analyzing the data quoted, it can be concluded that freelancers' work order is cheaper and less risky for entrepreneurs, however, the earnings are still very low for freelancers, some of them are collected by intermediaries (e.g. contracting companies). Polish freelancing is a novelty in the changing labor market, unfortunately Polish labor law is not keeping up with such rapid changes, there are no legal regulations (contracts, personal data protection, confidentiality of information) regarding this form of cooperation (cooperation, sharing etc.). It is important, however, that the ability to adapt to changing conditions influences the effectiveness, commitment and dynamic development of the individual and organization.

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THE EMPLOYEES AND THE NEW GLOBAL TRENDS IN THE LABOUR SPHERE

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Summary: Modern globalised world is constantly bringing new changes and challenges to the social and economical spheres of human life, including the labour sphere. The most profound conditionings to the labour sphere are connected with the development of globalization and new information and communication technologies. They influence and change the time of work, way of work, communication, interpersonal relationships, work-life balance etc. The article presents new trends in the labour sphere and the consequences of these trends for the employees presented on the case of employees in Częstochowa district.

Key words: labour sphere, employees, globalization, work-life balance.

Introduction

Processes related to globalization have a diverse impact on the sphere of work. It may be positive, because they create possibilities unprecedented so far for both employers and employees. Yet, they may be simultaneously negative, being detrimental in the psychological, economical or ethical sphere of human existence. The processes of globalization enable the expansion of employees activity into new markets, stimulates competition and facilitates searching for the best places of employment and life. On the other hand, it can increase the economic stratification of societies, level of unemployment, pauperization of underdeveloped countries, and finally negatively affect the quality of life and work of employees.

The development of mass media, new means and forms of communication based on the Internet and digital media, as well as the intensification of migration processes have contributed to the unification of cultural or political patterns of human behaviour and the increasing interdependence of entities in these areas, i.e. cultural or political globalization. The development of new technologies, the increase in the level of computerization of societies and, as a consequence, an increase in the role of information in social life led to the development of the so called information society (Karczewska, Bsoul-Kopowska 2017, pp. 790-791).

Flexible time of work is spreading around the world, employees are often available to the employer also after the mandatory working time, what can undermine the employees' work-life balance. All these processes affect the sense of security in the society and the shape of social security. Space barriers due to the information technology revolution are of lesser importance. From a cultural perspective, this information revolution enables the development and diffusion of global cultural patterns around the world through digital media, determining people's choices of lifestyle, behavior patterns or values as well as life aspirations.

Some new features of the world of work in the modern "risk society" occur, including the following (Swadźba 2012, p. 59):

- the possibility of easier, faster dismissal of employees,
- redistribution of risk; it passes from state to an individual through the social security system,
- the risk that knowledge and education acquired in one's youth is not enough for the whole professional life.

As Z. Bauman pointed out (2006, p. 72), the flexible labour market has changed the current treatment of work based on the involvement in work. It is not easy to identify one's roles, social positions, and build the individual's identity based on work due to the instability of the sphere of work, including contemporary employment contracts. Therefore, the idea in which an employee connects his life with one workplace or industry is no longer valid. In the modern labor market professional flexibility, training, retraining and adaptation to frequent changes in professional life are valuable.

Information plays the key role in the professional and private life. The development of technologies enabling constant communication which breaks the barriers of space has caused many changes in political, economic, cultural and everyday life. New types of mobile electronic devices such as tablet, smartphone, gps connected to the Internet enable immediate transmission and reception of information, data, constant contact with the employee/employer and control over the employee and his place of residence at any time of work outside the company's headquarters. In addition, information and knowledge play the key role in an increasing number of professions and in an increasing number of industries.

Information and production technologies which appear more and more often in the workplace facilitate and improve human work. Among others it provides possibility of teleworking, which means remote work, often connected with cooperation within virtual teams. Virtual organizations come to existence, which are spatially scattered, yet focused on the common goal which is achieved with the use of modern information technologies, helping to break time and spatial barriers). Work with the use of new technologies is becoming more common, changing the structure of activities performed in the work process.

However, the mentioned saturation of work with technologies may lead to impoverishment of work or to increased monotony of work, and in some cases even to the complete replacement of human labor by the machine. Teleworking can facilitate work of a lot of professional groups. It may affect the increase of productivity and employees' satisfaction, but on the other hand a lot of research proves that it may result in loneliness or a sense of isolation and a decrease in job satisfaction (Rudnicka 2007, pp. 104-110).

Next potential negative aspect of modern forms of work is the exclusion of certain groups connected with varying degrees of access to new technologies, such as groups of older people, less educated people, those living in regions with a less developed telecommunications network etc. These groups employees are more exposed to digital

exclusion and to the emergence of barriers in their professional activity and development (Rudnicka 2007, pp. 110-112).

Manuel Castells states that the information and technological revolution has created a new form of society - the so-called network society – and networked forms of organization, which largely affects the variability and instability of work. The development of the Internet and social media networks also affect the networking of interpersonal relations, including relations in the sphere of work (Barney 2008, pp. 114-115).

Interpersonal human relationships at work play a significant role in communication processes and, as a consequence, influence the quality of work and employees' satisfaction from work (Robak, Albrychiewicz-Słocińska 2017, p. 451). Hence, the communication and quality of relationships at work are important both for the employer and the employees.

The consequences of contemporary economic changes for employees among others include: the approaching vision of unsuitability of employees due to the globalization of labor markets, higher completion, work automation, a decrease in the value of experience and competence due to the rapid pace of changes, increase in the importance of intellectual capital in the company (employees' skills related to acting on the network) etc. (Sennett 2010, pp. 71-84).

Methodology

The aim of the research was to analyze the modern changes in the labour sphere and their consequences to the quality of work and life of the employees. The method chosen for the research was the survey method. The research was conducted among the population of district Częstochowa in the year 2018. The respondents were the employees working in the Częstochowa district and the selection of the sample was made using the snowball method. The respondents were surveyed using a questionnaire consisting of 22 closed questions with few exceptions when the respondent could answer the open-ended option: "other (what?)". The 300 respondents were surveyed outside the working environment and without the supervision of the employer, in order to get honest, independent opinions of the employees about their working conditions and attitudes towards work. The 276 full properly completed questionnaires were returned. Different industries and people with different levels of education and types of work were researched. The study is limited to the local dimension of employees working in Częstochowa district, but it shows some significant general changes in the labour sphere and it can provide important guidelines for future research on a broader scale.

Results and discussion

The results of the conducted research comes from 276 questionnaires from the employees of Częstochowa district conducted in the year 2018. The results shows important changes that have affected the work of a modern employee and its consequences for the quality of his work and life.

One of the issues reviewed was the employee eagerness to change his/her job. It served as one of the indicators of the satisfaction of an employee from his work. However it should be born in mind that the decision to change the job or not depends also on other aspects, such as employee's financial situation or situation in the labour market in a given industry. The respondents were asked: do you plan to change your job in the near future? The answers are presented in figure 1.

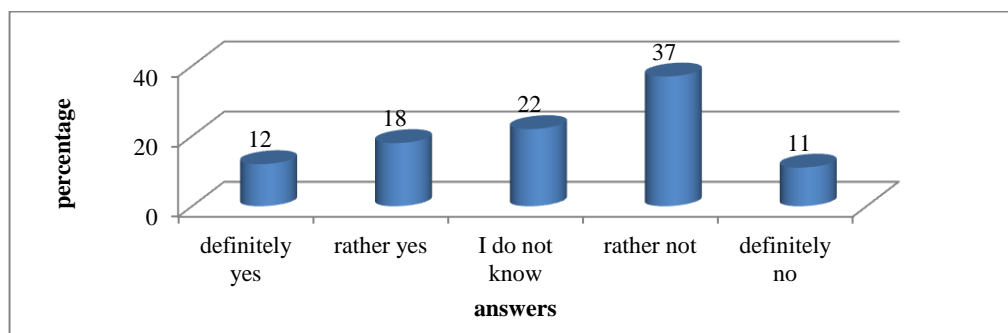


Figure 1. Planning to change own job in the near future. N=276. Results in percentage

Source: Results of own research

The majority of respondents (37%) claimed that they rather will not change their job in the near future and 11 percent are sure that they will definitely not do this. Yet, 30 percent of respondents definitely or rather plan to change the job. The number of undecided respondents was 22 percent.

The surveyed were also asked about the level of satisfaction from their job: to what extent do you feel satisfied with your work? The results indicate that the majority of employees (51%) have medium level of satisfaction from work and significant number of employees have got very high or high level of satisfaction. Only 7 percent admit that their level of satisfaction is low or very low.

The collected data were analyzed in terms of the relation between the level of satisfaction from work and the eagerness to change the job. The data are presented on the figure 2.

Among those who wanted to change the job, the number of people who were satisfied was the lowest (15,5%), among those who did not want to change their job, the number of satisfied employees was the highest (65,6%). Among people who did not know if they wanted to change a job, the highest number of people was those of medium satisfaction with their work (70,5).

Another two aspects were also analyzed together: the stability of employment and satisfaction from work (figure 3).

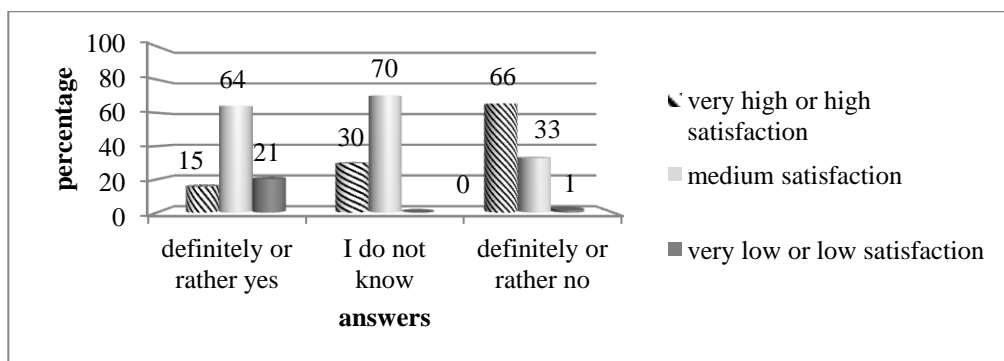


Figure 2. Level of satisfaction from work and the eagerness to change the job. N=276. Results in percentage

Source: Results of own research

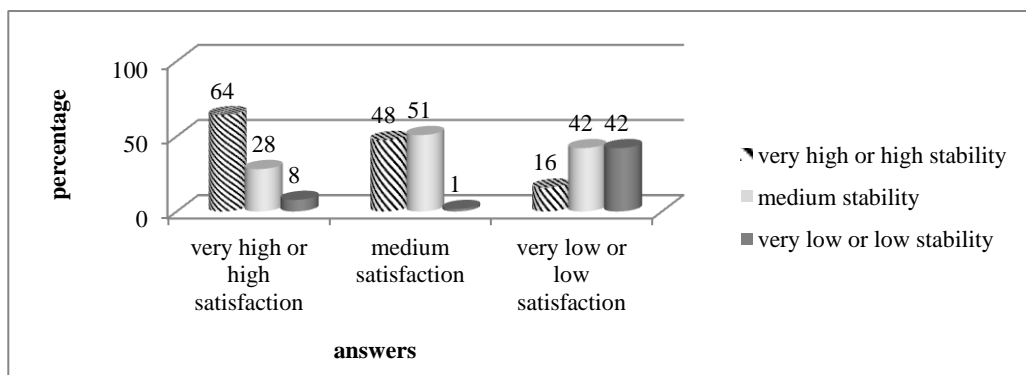


Figure 3. Stability of employment versus satisfaction from work. N=276. Results in percentage

Source: Results of own research

Among those who have got stability of employment, the highest share of people represent those with high level of satisfaction (64,1%) and at the lowest share represent those of low satisfaction 15,8%. Medium stability gives medium satisfaction for the majority of people (50,8%) and the majority of people with low stability has got low satisfaction from work (42,1%).

Another researched aspect was availability to the employer even after working hours, during leisure time (e.g. telephone contact with the supervisor). The results are presented in the figure 4.

The majority of employees are available to the employer after working hours. Very frequent contact with employer concerns 23 percent of the surveyed and rather frequent contact concerns 36 percent of the employees. To one third of employees it happens in exceptional situations, only 12 percent claimed that it has never happened.

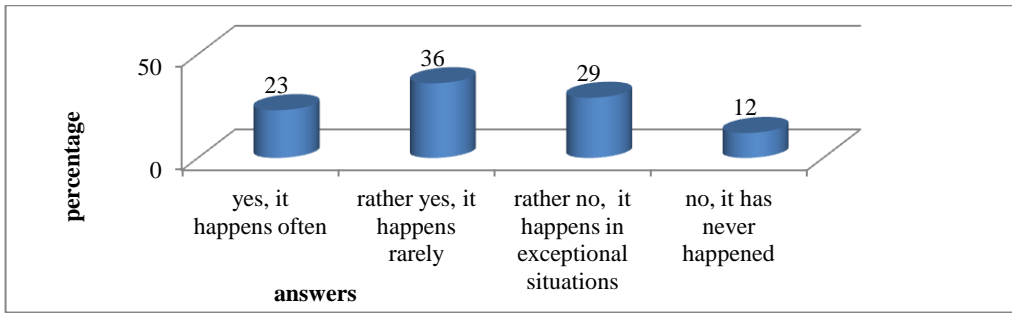


Figure 4. Availability to the employer even after working hours, during leisure time (e.g. telephone contact with the supervisor). N=276. Results in percentage

Source: Results of own study

The technological development in communication pertains to the majority of employees. The 58% of them declares very high or high level of using the Internet and its tools, 23 percent of employees declares a very low or low degree of using the Internet.

The researched were asked about the reason for employee's dissatisfaction with work. They could select more answers than one. The figure 5 presents the results.

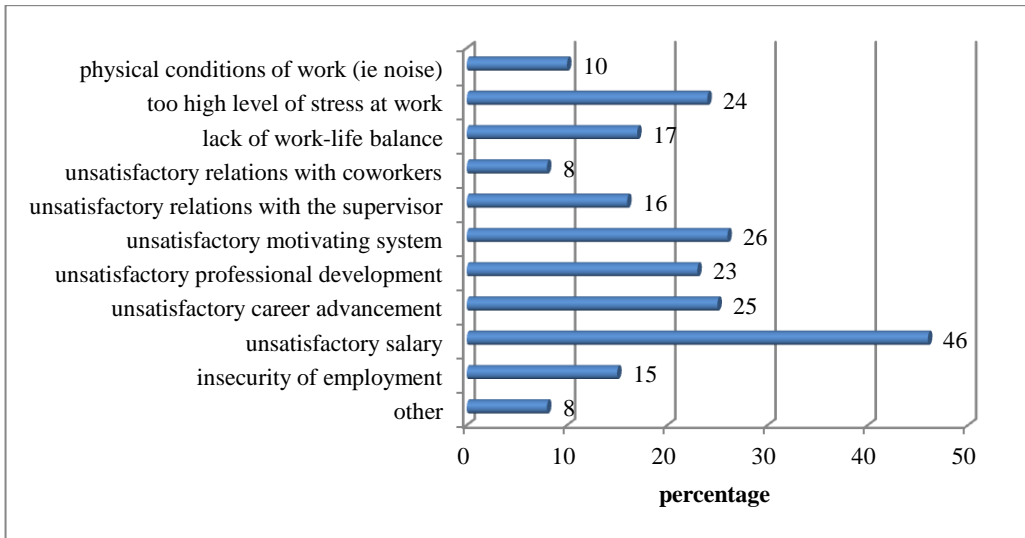


Figure 5. The reasons of dissatisfaction with work. N=276. Results in percentage

Source: Results of own study

The most common reason of dissatisfaction for the respondents was unsatisfactory salary (46%). The other mentioned factors were: unsatisfactory motivating system (26%), unsatisfactory career advancement opportunities (25%), too high level of stress

at work (24%) and unsatisfactory professional development opportunities (23%). Around 17 percent of the surveyed mentioned lack of work-life balance. Other factors, not presented on the figure, were: too much overtime, too few people, insufficient number of personnel, overload or “nothing”.

On the other hand, there was also a question about the sources of employees satisfaction from their work. The respondents could select more answers than one. The answers are presented on the figure 6.

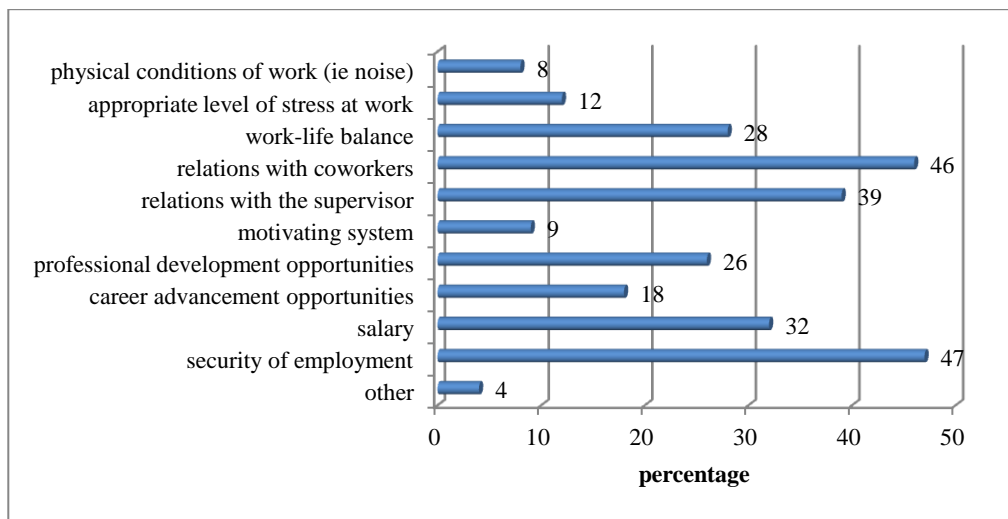


Figure 6. The reasons of satisfaction from work. N=276. Results in percentage

Source: Results of own research

The most common factor bringing satisfaction to employees were: security of employment (47%), relationships with coworkers (46%) relations with supervisor (39%) and the salary (32%). Quite significant were also work-life balance (28%) as well as professional development opportunities (26%). Other factors, apart from the ones presented in the figure, were: customer satisfaction, commuting to work, position or “nothing”.

The last figure (figure 7) presents the relation between availability to the employer and the level of stress of an employee.

As the figure shows, there is a relation between two researched aspects of working life. The highest level of stress concerns mostly and especially those employees who are available to the employer after working hours (66%) and the highest share of employees whose stress is low represents employees who are not available to employer after working hours (55%). The rapid flow of information connected with the technological development, enabling efficient communication and permanent access of employers and clients to the employees may limit the time off from work and destabilize the balance between work and private life. Possible consequences in

this area include: workaholism, professional burnout, problems with balancing different spheres of life (Chrapek 2016, pp 169-176).

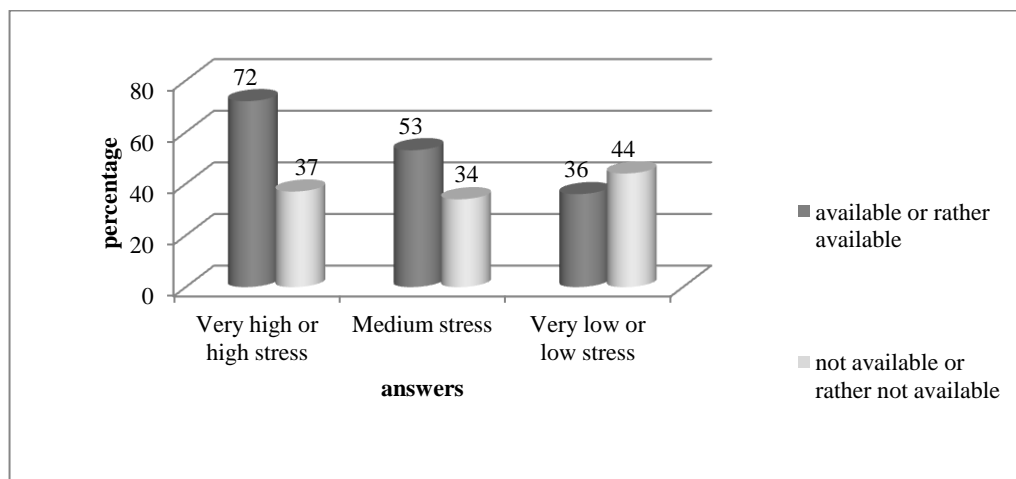


Figure 7. Availability to the employer after work versus stress level. N=276. Results in percentage

Source: Results of own research

Another important problem of the modern Polish labour market is the lack of stability of employment and constant changes which some employees are not ready for. Due to changes related to the flow of information, a knowledge-based society is being created. In the 21st century, scientific knowledge and new technologies are the basis for the development of modern societies.

The statistically significant relations between several analyzed variables (correlation using the Kendall tau b test (τ)) has been found. The coefficient takes values in the range $<-1, 1>$ and t value of 1 means full compliance, while the value of 0 shows that the arrangements of two variables are incompatible. While the value -1 indicates the total opposite of the ordering of variables. So it determines both the strength and direction of dependencies between variables. In the research the significance level of $p = 0.05$ was assumed.

It has been proven that the lower the employee satisfaction rate is, the more frequently the employee is eager to change the job ($\tau = -0.47$). What is more, the smaller the sense of stability of the employee's employment is, the more frequent the willingness to change job is ($\tau = -0.22$). The greater the sense of stability of employment is, the higher the degree of employee's job satisfaction is ($\tau = 0.32$). Additionally, the greater the employee's permanent availability to the employer is, the greater the degree of employee's stress burden is ($\tau = 0.18$).

Therefore, for the employee's satisfaction from his job, the stability of employment is important. If the job satisfaction is low, the employee takes into account the change of the workplace. It was also proven that the constant availability of an employee for the employer creates a more stressful working environment for the employee. It may have a negative impact on employee's satisfaction with work and employee's physical and mental health.

The employees who want to stay informed about the latest developments in the field of science and technology should continue to educate themselves to follow the changes. As the research shows, most of the white-collar workers use the Internet in their work. One of the greatest strengths of the employee is his knowledge which is being possessed and developed throughout life (continuing education) (Castells 2003). Employees point to the lack of development prospects for promotion at the place of employment as their source of dissatisfaction from work. They are expected to continuously improve their knowledge and competences, while are not provided with development opportunities.

Conclusion

The sphere of work is one of the most important areas in human life. It is the main source of obtaining means of meeting needs and to a large extent it is also a source of satisfaction and self-fulfillment of an individual. It affects the level of the individual's quality of life. What is more, it is a source of gratification, self-realization of individual but at the same time potential threats to its psychophysical well-being.

Changes in the social and economic sphere caused by the development of globalization, science and new production and communication technologies are continually occurring in most developed countries around the world. If the employees want to keep up with the rapid development of the organization and be able to compete in the labor market. Employees have to face these changes and adapt to them at a rapid pace.

According to the results of the research, the lack of stability in employment and the pressure to be still available to the employer reduce the sense of job satisfaction of employees and increase the probability of the employee leaving the workplace in search of a more satisfactory working environment.

There are many positive consequences associated with technological development, communication opportunities, distance working, flexible working time, continuous improvement, learning and information gathering, but it can also have destructive impact on the psychophysical well-being of individuals. Technological development, including the one in the sphere of communication, an increase in the role of information and knowledge in the life and work of an individual led to the creation of the knowledge society and information society. The information society requires staying informed and up-to-date all the time, constant learning, development, which can lead to overloading with professional duties and professional burnout.

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IV. PUBLIC MANAGEMENT

CRISIS MANAGEMENT IN THE NATIONAL SECURITY SYSTEM AT THE LEVEL OF NATIONAL AND EUROPEAN UNION POLICY

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Abstract: Preventing any threats, both natural and those caused by human activity, is the responsibility of public administration and various forces (such as fire service, army, border guard, police etc.) which represent the support for the state in the situation of security threats. Nowadays, with the plethora of threats, the responsibilities of the state considered as an organization include planning, organization, responding to threats and preventing them. This paper attempts to draw attention of the reader to the problems connected with crisis management which are critical to national security. The aim of the paper is to present the role of crisis management in creating the system of national security. The paper also attempted to identify such concepts as national security, crisis and crisis situations. The role of crisis situations in the system of crisis management was also determined while the system of crisis management was characterized. The study used an analytical and synthetic method combined with the analysis of the related literature.

Key words: crisis management, national security, public administration, crisis, crisis situation.

Introduction

The basis for ensuring sovereignty and independence of the country is efficiency of its structures, both governmental and in local governments, which are responsible for ensuring security in all areas of state activities, directly affecting its existence as well as well-being of the citizens. Therefore, it seems justified to link security in the country to the national security system.

Nowadays, with the development of modern civilization and society, and inequalities leading to social and economic disparities between individual states, the number of threats is gradually increasing. Consequently, numerous contradictions occur between states, followed by tensions. For these reasons, states are facing more and more challenges that require development of strategies that have to ensure that the threats are dealt with. This also forces the states to monitor and prevent any threats which put at risk the basis of the state's being and wellness of its citizens.

One of the consequences of the development of industrial civilization is devastation of the natural environment which has various effects on ecological disasters caused by e.g. technological failures. Obviously, various natural disasters also remain to be dangerous. Therefore, both natural disasters and those caused by human activity have to be prevented through organized activity of the entire society in the state and individual local communities present within this society and through international cooperation. The responsibility for organization of the entire society and

individual communities lies with central and local public administration, which should be effectively supported by the respective governmental and local government structures.

The above threats were indicated by e.g. Ulrich Beck in his book "Risk Society" (Beck 2002, p. 33), who emphasized various dangers resulting from the development of modern civilization and the respective socio-economic transformations caused by e.g. negative consequences of progressing globalization. Over the ages, humans have never been free of threats while taking actions to ensure basic means of existence often involved various dangers and risky situations. People have never lived in so modified and often degraded natural environment as they do today, caused by production activities. Furthermore, they have never coexisted in such a complex and antagonized societies created through social development stimulated by quickly progressing development of modern civilization. Therefore, people are facing more and more challenges, which always involves some risks and the related threats (Bsoul-Kopowska 2016, pp. 96-97).

The area connected with national security relates mainly to adjustment of both state and self-governmental structures to prevent any threats to the state and prepare society for relevant behaviours in situation where external threats emerge, especially those of political and military character.

However, it is worth emphasizing that management of national security does not only mean preparation of state structures and citizens for functioning in the situation of external political or military threats or resisting military aggression. Nowadays, this concept also concerns actions taken by public administration to deal with natural disasters or technological failures, consisting in making right decisions and coordination of forces and resources allocated for responding to crises. Therefore, crisis management is a very important component of the system of national security management.

The aim of the paper is to indicate the idea of crisis management in activities taken by the state to ensure peace, harmony and sense of stability and security to all citizens and to emphasize its role in creation of the system of national security.

Theoretical basics of crisis management

With changes occurring in the area of global security which have been observed in recent decades, the understanding of the concept of security has substantially evolved. With the specific character of contemporary threats, society is facing new problems, not only those resulting from natural disasters but also from new technological threats and various manifestations of terror. Therefore, the situation requires comprehensive and integrated tools for *crisis management*, which allow for using military and civil components at various levels of response.

Scientific research and development studies concerning the area of security and defence are of strategic character and represent an interdisciplinary domain of science. The research methodology adopted in this paper is comparative analysis of normative acts defining functioning of crisis management. With regard to national legislation, the

study analysed acts, ordinances and guidelines concerning the problems of development, maintenance and tasks of crisis management systems. The tasks concerning development and coordination of plans for individual levels of public administration responsible for civil protection were also discussed. The paper also attempted to identify such concepts as national security, crisis and crisis situations.

The literature devoted to the problems of management during crisis situations presents various attempts to define the phenomenon termed crisis. Crisis has been considered as a relatively unexpected and strong phenomenon, which changes the status of things and processes developing in unexpected and undesirable directions and, consequently, threatening previous transformations not only in states and societies but also economic and political situations.

It is generally accepted that crisis situation is generated through presence of specific threatening conditions and emergencies. Its culmination is occurrence of the chances for materialization of the threats if humans fail to prevent intensification of individual elements which determine the threats. The beginning of a crisis situation occurs at the moment of manifestations that indicate fast appearance of real threats which are usually perceptible in a society.

According to B. Zdrojewski, "a crisis situation means a state where accumulating internal and external tensions (between systems) lead to destabilization of the system functioning and taking specific corrective measures that might help defuse the crisis situation or, if the actions taken are ineffective, turn into a crisis" (Zdrojewski 2014, pp. 53-55).

To many experts who have explored the problems of crisis management, the above threats are inherent in the national security system and point to the activities aimed at reducing the likelihood of a specific crisis situation and, if it occurs, taking control and restoring and maintaining the previous state. They also often demonstrate that these activities are purposive and often taken in risky conditions.

Therefore, crisis management consists in general in prevention of possible threats, both potential and current, preparation for their occurrence or responding to crisis situations and maintaining or restoring the previous state.

Furthermore, the aim of the crisis management is to strive for minimization of potential threats and effective activities in case of emergencies, with their effectiveness largely depending on the skills, competencies and authority of both the individuals who manage the activities and those taking part in rescue activities.

Since 2004, when Poland became the European Union, the regulations concerning crisis management have been adapted to the requirements used in this community (Bsoul-Kopowska, Karczewska 2016, pp. 261-265).

Crisis management: integral part of national security

Overcoming crisis situation that emerge in the macro scale have to be faced by public administration entity at the state and voivodeship level due to their competencies and means they are allowed to use. Therefore, they are responsible not only for the decision-making but also for supervision of activities and choice of

resources and means that can be involved in a particular case of the crisis management. Therefore, crisis management at this level of activity represents an important component in the system of managing national security.

Since the quickly progressing development of modern civilization has an ambivalent character, it contributes to the increase in the standard of living of society, but on the other hand, it leads to various threats to security. The threats can be more or less dangerous and easier or harder to be overcome. Smaller or less dangerous threats can be successfully dealt with by various organizations that support the state's activity at a local level e.g. in terms of counteracting smaller natural disasters and problems of social policy.

However, in the case of more serious threats, with bigger scale and territory involved, it is necessary to use the forces and resources owned by various state's structures and requiring specialized organizational entities prepared for such activities. Consequently, the need arises for the development of the concept of crisis management. Crisis management is the responsibility of relevant state administration units, supported by local government administration divisions which are required by law to ensure public security. Their obligations also include (Sienkiewicz-Małyjurek, Krynojewski 2010, p. 9):

- ensuring safety to all citizens
- guaranteeing protection of the local infrastructure and personal property by ensuring fire service and anti-flood protection.

Nowadays, there is no more dynamic and complex phenomenon in the area of national security as management in crisis situations. This is caused by the fact that situations that expose security at risk are often difficult to diagnose while prediction of the possible effects is difficult, especially because they occur suddenly and develop rapidly and spontaneously. For this reason, fast decisions are needed concerning the methods of their overcoming. Therefore, they lead to situations full of tensions and distress. Consequently, it seems obvious that they are termed *crisis situations*.

Nowadays, with various contradictions that antagonize individual states and, with both explicit and implicit conflicts, the unconventional methods to conduct aggressive activities have emerged both in Europe and in various parts of the world. One example is hybrid wars and wide-scale terrorist activities. Therefore, each country and its individual bodies are obliged to take various urgent counteracting measures (Kitler 2010, p. 5). This requires efficient functioning of all state agendas which have to care for ensuring readiness for counteracting potential threats.

The effectiveness of countermeasures is undoubtedly much more effective if citizens cooperate closely with government branches. For this reason, it is essential to prepare society to cooperate with both governmental and local-government institutions whose aim is to ensure security for the state and its citizens (Molek, Stec, Marciniak 2000, p. 47).

Therefore, adequate preparation of state structures requires, according to the provisions of the Strategy of State Security, development of knowledge about new forms of "... threats, with particular focus on asymmetric threats and the threats connected with the development of civilizations, political and social clashes, and

needs searching for new solutions in order to ensure more efficient performance of the tasks of crisis management and civil protection, including civil defence" (Strategia Bezpieczeństwa Narodowego Rzeczypospolitej Polskiej 2007, p. 28). This is connected with the necessity to e.g. develop the management systems that require cooperation between public administration entities of any levels and the entities from outside of this area. Therefore, system functioning needs to have strong legal foundations, with one of them being the Crisis Management Act, which represents a significant step toward implementation of the systematic solutions concerning crisis management (Strategia Bezpieczeństwa Narodowego Rzeczypospolitej Polskiej 2007, p. 8).

The critical problems connected with crisis management were standardized in the *Crisis Management Act*. This act defines *crisis management* as a function of multifaceted national security management. Its aim is to create conditions necessary for *crisis management* in the system of current national security (<http://isap.sejm.gov.pl/DetailsServlet?id=WDU20070890590>).

The basic goal of the *Crisis Management Act* is to develop the structure of the national *Crisis Management System*. According to its provision, the President and the Council of Ministers are the executive and governing bodies of the Republic of Poland. Furthermore, the opinion-giving and advisory support concerning initiation and coordination of activities taken in crises is provided by the Government Crisis Management Team working at the Council of Minister, subordinated to the Prime Minister. Furthermore, the Government Centre for Security was established to coordinate the initiatives of the Council of Ministers and the Crisis Management Team.

Furthermore, crisis management teams are also appointed at various levels of government and local administration to support state and local government officials responsible for performing tasks within crisis management. Furthermore, crisis management centres are established as executive bodies for these teams. The act imposes various tasks on these structures depending on the level, as presented further in this chapter.

At the level of the Ministry of Defence, the Crisis Management Team and the Crisis Management Centre were instituted. Both institutions are of permanent character, with their tasks including monitoring of current crisis threats in Poland.

Management of crisis situations is included in competencies of various institutions and both state and local government organs. The highest bodies at the state level responsible for crisis management are the President and the Council of Ministers of the Republic of Poland. Furthermore, at the level of the government, the crisis situations are dealt with by the team for crisis situations, coordinated by the Minister of Interior. As an auxiliary body, the team is called by the President of the Council of Ministers. In situations of military threats, the team is managed by the Minister of Defence.

The responsibility of the Government Crisis Management Team is to prevent natural disasters and prevent its effects. There are permanent or interim bodies of crisis management at all levels of state and local administration.

Crisis management at the level of the European Union

Lisbon Treaty introduced so called Solidarity Clause which means a commitment to solidarity between Member States in the event of aggression on the territory of one of the member states. This commitment also applies to the readiness to act in the event of a possible terrorist attack, disaster or natural disaster as well as allows the use of all possible forces and resources - should the need arise - including military intervention.

According to the article 222 of the Treaty on the Functioning of the European Union (TFEU): "*The Union and its Member States shall act jointly in a spirit of solidarity if a Member State is the object of a terrorist attack or the victim of a natural or man-made disaster.*" The task of EU in such situation is to mobilize all the instruments at its disposal, including military means made available to EU by the Member States, to prevent terrorist threats in the territory of the Member States; protecting democratic institutions and civilians against a possible terrorist attack and to provide assistance to the Member State in its territory, at the request of its political authorities, in the event of a terrorist attack as well as assistance to a Member State in its territory at the request of its political authorities in the event of a natural disaster or man-made disaster.

What is more, in a situation in which a Member State has become the subject of a terrorist attack, a victim of a natural disaster or a victim of a man-made disaster – in accordance with art. 222, section 2 - the other Member States are obliged to provide him assistance at the request of its political authorities.

EU activities in the sphere of crisis management are implemented with the use of various instruments and numerous tools, of which the most important include the following:

- *Directorate General for Humanitarian Aid and Civil Protection, (DG ECHO)* – which is responsible for providing assistance to victims of natural disasters and disasters caused by human activity, also outside the European Union (http://www.europarl.europa.eu/atyourservice/pl/displayFtu.html?ftuId=FTU_6.3.2.html).
- *EU Civil Protection Mechanism* – which aim is to provide better protection especially for people, but also for the environment and property, including cultural heritage, in the event of a major emergency situation (http://www.straz.gov.pl/panstwowa_straz_pozarna/europejska_ochrona_ludnosci_w_tym_mechanizm_ochrony_ludnosci).
- *Stability Instrument* – financial instrument, functioning since 2007, which aim is to provide a quick response to the crisis and to the need to take action to stabilize the situation at its place of occurrence when long-term assistance to its elimination is still in the planning phase. Within this instrument the projects regarding, inter alia, support in the field of mediation, shaping confidence in interim administration, strengthening the rule of law and the functioning of the temporary justice system as well as restoring the efficiency of the countries concerned are financed.
- *Civil Protection Financial Instrument*, functioning since 2007 – it includes the possibility of financing projects aimed at improving the rescue operations carried

- out under the European Union Civil Protection Mechanism and raising readiness in the event of an emergency situation.
- *EU conflict early warning system* – an instrument within the **European External Action Service, EEAS**. This system helps in assessing the situation in existing conflict-generating or potential for conflict regions. Furthermore, it allows the assessment of the five following risk areas including aspects of: political, social, environmental as well as security and economic policy.
 - *Crisis management operations carried out as a part of Common Policy of Security And Defense* under which military operations and civil missions are carried out (https://www.msz.gov.pl/pl/polityka_zagraniczna/polityka_bezpieczenstwa/operacje_nato_i_ue/zarzadzanie_kryzysowe/).

Conclusion

Current solutions concerning crisis management indicate that the response of crisis management to non-military threats is relatively effective. This concerns in particular responding to natural disasters. Crisis management also involves tasks performed for the Minister of Defence when the state has to respond to political and military crises. This also concerns activities implemented within the European Union and NATO and the activities to coordinate participation of forces and resources of the national defence in supporting civil structure during responding to non-military crises.

It is worth emphasizing that the argumentation for the draft act indicated that it was supposed to provide basis for creation of the system aimed to ensure effective measures taken in case of threats that need taking non-standard actions by public administration bodies and the necessity to support these activities by Armed Forces of the Republic of Poland. This relates first and foremost to situations where there are no reasons for declaring one of the states of emergency, such as e.g. state of national calamity or martial law.

However, before the Crisis Management Act was passed, the legal order was based on the methods used for functioning of bodies of public administration, services, inspection and guards in states of emergency. Concrete solutions concerning functioning of these entities in situation of threats were missing. However, this required implementation of special mechanisms to ensure both effective monitoring of threats and taking actions to neutralize them or substantially limit their effects.

In light of the above, the Crisis Management Act supplemented the already existing system of national security management through implementation of the principles that allow for preparation of the state structures to take adequate measures in non-regulated states of emergency (Mołek, Stec, Marciniak 2000, p. 54).

In conclusion, the aims of the system of national security management and crisis management seem to be consistent. The precondition for proper functioning in both cases is to prepare adequate structures for efficient activity, with this preparation involving planning, organization and implementation of initiatives aimed to ensure performance of tasks concerning management of national security.

The state, as an entirety and individual citizens, can expect that national security management is efficient, continuous, resistant to various disturbances and constantly improved. As part of these activities, crisis management should ensure adequate assessment of potential threats, create conditions for fast responding to them, minimize the effects of the threats and ensure capabilities to restore what was disturbed or destroyed by crisis situations.

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FOUNDATIONS PHASE AND FEASIBILITY PHASE IN PUBLIC PROCUREMENT

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Abstract: Today's enterprises have to meet the demands of a turbulent environment. The chances of success enterprise participating in the implementation of projects in the field of public procurement, the opportunity to increase market share is created by Agile PM. In the surveyed enterprise Agile PM includes Feasibility Phase and Foundations Phase. Even in small projects, they are not combined. Members of the team positively assess this mode of operation, because it facilitates a better understanding of the goal of every project.

Key words: Agile PM, DSDM, Feasibility Phase, Foundations Phase, public procurement.

Introduction

Variable external conditions, growing competition are one of many challenges that a modern enterprise must face. „Both the domestic and foreign activities of business entities entice entrepreneurs to undertake various actions with the aim of achieving the desired market position. Enterprises strive towards the achievement of a highly competitive position on the market and maintaining such a position” (Skowron-Grabowska, Sukiennik 2015, p. 1046).

"Contemporary organization operates in a rapidly changing reality, in which the changes take place in many spheres and fields of life - including political, legal, social, market or technological. The environment of the organization is also changing. Its complexity, volatility, uncertainty and unpredictability cause that contemporary organizations face serious challenges that they must face up to (Janiak 2011, p. 85). Enterprises operating on the market must, therefore, meet primarily the large competition and expectations of contractors. Special requirements are placed on entities whose activities are to a large extent the implementation of the public orders obtained. These enterprises have to deal not only with the challenges posed by the market situation, but also to meet the specific conditions of the public procurement. They are indicated by the ordering party and are directly derived from the applicable provisions of law. The uncertainty of entities operating on the public procurement market also concerns the possibility of joining public procurement procedures. Forecasting by a company that wants to apply for a public contract, what number of procedures in a particular field will be launched is very difficult. The amount of public funds granted to a given unit in a year determines the number of public procurement proceedings initiated by it. It is essential for every organization to analyze the environment in which it has to operate, in order to be able to identify the favorable

prospects and opportunities at hand and avoid any unwanted effects of negative external factors influencing the situation” (Volkovaa 2015, p. 479)

Enterprises for effective functioning on the public procurement market should demonstrate agility. The term agile is understood in various ways depending on the context of its use. One of them is agile culture, philosophy, (eng: mindset) (Konieczny 2014, p. 379) on managing complex projects, based on close cooperation of project participants, iterative product development process and understanding of the need to adapt to dynamically changing current design requirements. In Polish, agile means clever, mobile (Stanisławski 1988, p. 15). One of the challenges for enterprises is the unpredictable, changing environment. "Thompson (1967) argued that one of the organization's most important tasks is to manage uncertainty. Drucker (1968) describes the concept of entrepreneurship as a search for change, responding to change and using change as an opportunity "

Sharifi, Zhangs (2001, p. 772). Agility is recognized as the ability to respond quickly to changes and adapt to them. Cobb, behind David Rico, is agile (agility) as: the ability to create change and respond to it in order to benefit in a turbulent global business environment; the ability to quickly change the priorities of resource use when requirements, technology or knowledge changes; quick response to sudden market changes and emerging threats thanks to intensive cooperation with the client; the use of evolutionary, incremental and iterative methods of product delivery to arrive at the optimal solution from the client's point of view; maximizing business value by means of processes and documentation implemented in the right size, as many as needed and exactly on time (Cobb, p. 4). However, now due to the unpredictability of the environment and hyper-competition it is not sufficient to develop one strategy that would allow for gaining competitive advantage. There appears a need for multi-scenario designing of the future (Griffin 2004, p. 223) or the creation of so-called choice options (Raynor 2008, p. 224) enabling flexible adaptation to the current changing market needs. Indispensable in this regard is the ability to capture subtle signals from the environment and creating based on them solutions that reject the current trends for the implementation of pioneering plans to play the market game (Bieńkowska 2016, p. 257)

The use of Agile Projekt Management by companies participating in public procurement may contribute to improving its market position. In the DSDM process (this term is used as a synonym for Agile PM) in the initial phases, the details of the project implementation method are not determined. Details appear over time in subsequent phases. This allows the company to join several tenders at the same time without having to engage all of its resources from the beginning. The purpose of the article is to try to answer the question whether these companies under Agile PM use the Feasibility Phase and Foundations Phase separately (basics) separately. These phases were chosen because they are two main ones. initial phases.

The research method used was the analysis of the subject literature, legal acts and documentation of tenders for company X, as well as an interview conducted with 32 people implementing projects in the field of public procurement.

The concept of public procurement

"Public procurement is one of the important issues of the functioning of modern states of law, where the authorities of this state are obliged to act on the basis and in the area of law. In the system of Polish law, it is also important that public procurement is inextricably linked to the spending of public funds, which takes place according to legal rules." (Sadowy 2013, p. 16). The legal acts give a legal definition of the public contract. "The European legislator focused on the contract as the key legal act for orders, because it involves making a declaration of will, in which an institution with public funds undertakes to pay. A similar solution was adopted by the Polish legislator in art. 2 point 13 of the Polish Civil Code, in which he concluded a legal definition of public procurement." (Wieloński, p. 29) The statutory definition of a public contract is contained in Article 2 item 13 of the Act of 29 January 2004 on Public Procurement Law (i.e. Dz. U. of 2013 item 907, as amended.) According to which it is a paid contract concluded between the contracting authority and the contractor, the object of which are services, supplies or construction works. The legal definition of a public procurement is too narrow and does not fully reflect its essence. For a company participating in the public procurement process, it is a special type of project understood as a complex action or a sequence of unique and related tasks that have a common goal and are to be completed within the set deadline, without exceeding the set budget, as required (Wysocki, McGary, 2005, p. 47). For the contractor, the public procurement contract is one of the elements of this project. This is, of course, the necessary component part constituting the basis for possible claims of both the contracting authority and the contractor. The entire process related to the conclusion and performance of the contract is of crucial importance for the enterprise participating in public procurement. From the entrepreneur's point of view, all activities related to the public procurement contract, i.e. the conclusion and performance of the contract, any possible warranty repairs, are treated as one public contract. "The definition of public procurement *sensu stricto* does not allow exhaustive portrayal of the relationship with the public interest and the complexity of the phenomenon of public procurement. They cover a much wider scope than the contract itself, as they concern both the activities leading to its conclusion and the stage of implementation of contractual provisions. Public procurement law organizes this sequence of activities into a series of stages between which there is a relationship, conditioning one another and making up the whole." (Wieloński 2012, p. 31). Therefore, one should agree with the view that we are talking about public procurement in the strict sense of the contract, and public procurement in the *sensu largo*. Only the public procurement contract is too narrow a shot, its implementation and settlement should also be considered as a public contract" (Panasiuk 2007, p. 60). In this study, the public contract is understood as a special project that begins the public procurement announcement, and it includes actions aimed at the performance of the public procurement contract, possible actions in the scope of the guarantee and finishes the final settlement of the contract between the contracting authority and the contractor.

Agile Projekt Management – The process DSDM

DSDM is a proven framework for Agile project management and delivery, helping to deliver results quickly and effectively and, over the years, has been applied to a wide range of projects - from small software developments all the way up to full-scale business process change. DSDM was initially created in 1994 through collaboration of a large number of project practitioners across many companies who were seeking to build quality into Rapid Application Development (RAD) processes as they developed, primarily, business-focussed computer solutions. The Agile Project Framework is an evolution of DSDM Atern®, the previous version of DSDM. It provides the information that is essential to enable any role on a DSDM project to use DSDM effectively and to understand how it is applied in practice. (Agile PM, p. 10)

Although Agile originally referred to the delivery of software (computer), as a result of evolution, a method was developed that can now apply to any project, including public procurement. The DSDM process consists of six phases: Pre-Project Phase, Feasibility Phase, Foundations Phase, Evolutionary Development Phase, Deployment Phase, Post-Project Phase. The main are the phases: Feasibility Phase, Foundations Phase, Evolutionary Development Phase, Deployment Phase.

Each phase plays an important role in the Agile PM process. For the purpose of this study, the Feasibility Phase and Foundations Phase will be characterized.

The Feasibility phase is intended primarily to establish whether the proposed project is likely to be feasible from a technical perspective and whether it appears cost-effective from a business perspective. The effort associated with Feasibility should be just enough to decide whether further investigation is justified, or whether the project should be stopped now, as it is unlikely to be viable.

The Foundations phase takes the preliminary investigation from Feasibility to the next level. It is intended to establish a fundamental (but not detailed) understanding of the business rationale for the project, the potential solution that will be created by the project, and how development and delivery of the solution will be managed. By intentionally avoiding low levels of detail, the Foundations phase should last no longer than a few weeks - even for large and complex projects. The detail associated with requirements, and how they should be met as part of the solution, is intentionally left until the Evolutionary Development phase of the project. For smaller, simpler projects, the Feasibility and Foundations phases can often be merged into a single phase.

The aim of Foundations is to understand the scope of work, how it will be carried out, by whom, when and where. The Foundations phase also determines the project lifecycle by agreeing how the DSDM process will be applied to the specific needs of this project (Agile PM, p. 29).

The Feasibility Phase and The Foundations Phase in public procurement of the surveyed company

The company in which the study was conducted is a limited liability company operating in this legal form in Silesia since 2003. The main subject of his activity is publishing, including publishing periodicals and periodicals. The company participates in public procurement primarily for services and their main subject are: printing and delivery services, as well as related services.

Table 1. Public procurement obtained in the tender procedure by the company in 2012-2016

Year	Number	Value
2012	3	538 621,10 PLN
2013	7	503 781,43 PLN
2014	6	808 253,90 PLN
2015	2	34 766,89 PLN
2016	8	187 009,89 PLN
Total	26	2 072 433,2 PLN

Source: a study based on the Public Procurement Bulletins of 2012-2016

In 2012-2016, the company received 14 service contracts and 12 public procurement contracts. The company has obtained 26 orders from 19 procuring entities, and the total value of tenders won is PLN 2 072 433. In the breakdown into individual years, the value and number of orders received is presented in Table 1. These are orders obtained exclusively in the unlimited tender procedure. The list does not include orders obtained in other modes. The figures only indicate those orders that have been resolved by selecting the most favorable offer. Procedures which have been annulled by the ordering party for various reasons and in which the offer was submitted by the company are not considered. The grounds for annulment are set out in the regulations. One of them is the situation when the prices of all submitted offers exceed the amount allocated by the ordering party for the performance of the contract. In this case, the contractors, despite all due diligence and proper preparation of the offer, will not obtain the order. The value of the contract should be real and the estimate made by the ordering party honest, however, in practice, there are situations when the estimate differs to a large extent from the market value. A public contract is a process consisting of activities performed by an enterprise before submitting an offer, placing an offer, entering into a contract, in the event of winning a tender and its implementation. In 2016, the company received 8 public contracts, but the activities carried out during it resulted in winning the tender in January 2017. The Contractor has selected the best offer on 03/01/2017. Therefore, the value of this order should be included in the total amount of orders received in 2016, because only then will we have a full picture of the company's activities in that period. The order price, which was granted in January 2017, is PLN 2,466,364. This amount exceeds the total value of orders awarded to the company in 2012-2016. The company's actions to obtain an order of such value best show that the company had to show agility.

The project in the field of public procurement begins the announcement of the tender. The tender announcement is analyzed in: Pre-Project Phase. The Pre-Project phase ensures that only the right projects are started, and that they are set up correctly, based on a clearly defined objective. In this phase, ads are selected to ensure that only the right projects are implemented. If the content of the announcement shows the potential possibility of the contract to be carried out by the company, the next stage of Feasibility Phase will take place. Persons giving answers in the interview were informed about what activities are carried out in individual phases of Agile PM. To the respondents were given a set of activities that are carried out as part of the DSDM process in both initial phases. Based on the knowledge possessed from the completed projects, they assigned individual activities to the appropriate phase. According to the analysis of the answers given, in all 26 proceedings there were Feasibility Phase and Foundations Phase. Separately, although in the practice of using Agile PM in smaller projects, the phases can be combined (For smaller, simpler projects, the Feasibility and Foundations phases can often be merged into a single phase). In Feasibility Phase in the proceedings, the team participating in public procurement examined whether the company has the appropriate technical and economic potential to be able to perform the order and whether its implementation is economically viable. If the execution of the order at this stage turned out to be unprofitable, the project would not be implemented. The company would not participate in the tender.

The Foundations Phase collected information necessary to prepare the offer, determine who will make it and who will perform the order technically. At this stage, a decision was also made to independently or in cooperation with other entities perform the contract. The DSDM philosophy is that “best business value emerges when projects are aligned to clear business goals, deliver frequently and involve the collaboration of motivated and empowered people (Agile PM, p. 16), that is why the project team is so important.

At this stage, a team of persons who participated in the project implementation - from the submission of the offer to the last delivery of the subject of the contract and the closure of the project - was also formed. In this phase of the project arises The Business Case. It provides a vision and a justification for the project from a business perspective. The business vision describes a changed business as it is expected to be, incrementally and at the end of the project. The justification for the project is typically based on an investment appraisal determining whether the value of the solution to be delivered by the project warrants the cost to produce, support and maintain it into the future, all within an acceptable level of risk (Agile PM, p. 39). The Business Case is prepared for the needs of project management and does not result from applicable law.

A public contract is a special project. The method of its implementation results not only from the will of the contracting party and the contractor but also from the applicable legal provisions. That's why creating The Business Case in Foundations Phase should take into account the applicable law.

Respondents positively assessed the occurrence of both phases in projects. They pointed out that their combination could cause difficulties in understanding the purpose of the project and its further implementation.

Conclusion

The figures only indicate those orders that have been resolved by selecting the most favorable offer. Procedures which have been annulled by the ordering party for various reasons and in which the offer was submitted by the company are not considered. The grounds for annulment are set out in the regulations. One of them is the situation when the prices of all submitted offers exceed the amount allocated by the ordering party for the performance of the contract. In this case, the contractors, despite all due diligence and proper preparation of the offer, will not obtain the order. The value of the contract should be real and the estimate made by the ordering party honest, however, in practice, there are situations when the estimate differs to a large extent from the market value. A public contract is a process consisting of activities performed by an enterprise before submitting an offer, placing an offer, entering into a contract, in the event of winning a tender and its implementation. In 2016, the company received 8 public contracts, but the activities carried out during it resulted in winning the tender in January 2017. The Contractor has selected the best offer on 03/01/2017. Therefore, the value of this order should be included in the total amount of orders received in 2016, because only then will we have a full picture of the company's activities in that period. The order price, which was granted in January 2017, is PLN 2,466,364. This amount exceeds the total value of orders awarded to the company in 2012-2016. The company's actions to obtain an order of such value best show that the company had to show agility.

To succeed, today's enterprises must be managed in a way that meets changing conditions. It may be helpful to use Agile PM. In the examined enterprise, elements of this management appear in all types of projects, also in public procurement. The company's management seeks to fully use the DSDM and, therefore, even in the less complicated public procurement projects, Feasibility Phase and Foundations Phase were separate. This enables better understanding of the Agile PM principles by the company's employees and what is related to their greater involvement in the project implementation. The team implementing the project should organize itself,

because it gives better chances for correct communication and what is connected with the success of the undertaking. In Foundations Phase, the team for the implementation of a specific public contract is selected by itself, so that the projects are carried out by people who are not only competent and involved in its implementation. Knowledge of both the regulations governing public and technical contracts necessary for the proper performance of the contract is required from team members. Not every team participant must have comprehensive knowledge. Agile PM assumes that the people who make up the team have more potential than each of them separately. For the use of DSDM, the first two main phases play a particularly important role in public procurement, because a poor assessment of their own

economic, financial, technical and intellectual potential can significantly reduce the chances of project success and even lose the tender.

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COOPERATION BETWEEN UNIVERSITIES AND SOCIO-ECONOMIC ENVIRONMENT, ILLUSTRATED BY THE EXAMPLE OF THE FACULTY OF MANAGEMENT IN CZESTOCHOWA UNIVERSITY OF TECHNOLOGY

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Abstract: The authors of this article discuss cooperation between universities and socio-economic environment institutions illustrated by the example of the Faculty of Management in Czestochowa University of Technology. Quality of this cooperation exerts influence on adapting curricula, courses being offered, as well as scientific, academic, and research activity of the university to current market needs. The article explores activities of universities' auxiliary bodies conventions which are to be special links between universities and their environment. According to the authors of this paper, this issue is of considerable importance in view of not only the currently conducted works aimed at implementing the new education act but also economic challenges being faced in Poland these days.

Key words: university management, socio-economic environment of higher education institutions, triple helix, convention

Introduction

Effects of economic transformation in Poland, which has been taking place for nearly three decades, can be observed in a wide range of areas. Higher education sector also undergoes major changes - in terms of how universities interact with socio-economic environment in particular. Statistical data indicates that the number of students has been rising since 1990¹, much like the scholarization index itself.² The said growth, however, translates into decrease in the quality of teaching and, therefore, widens the gap between what graduates learn and what employers expect. Businesses hope that prospective employees will demonstrate more practical skills and be well-prepared for doing professional jobs (Theime 2009).

Universities have noticed changing trends and have been monitoring them, including the ones that involve globalization (Hajduk 2014, pp. 23-33). Therefore, universities' management bodies became aware of the need for changing their view on management strategies being currently applied and, hence, adapting current curricula to market needs.

¹Data published by Central Statistical Office shows that the increasing number of students reached 1,953,832 heads in 2005/2006 academic year. Since then, the rate has been decreasing to reach 1,348,822 heads in 2016/2017 academic year (CSO 2017).

²This data shows that in the period 1990 - 2010/11, scholarization index had grown considerably from 9.8% to 40.8% net and, having reached the peak, it dropped slightly to 36.8% in 2016/2017. (CSO 2017).

Given the fact that application of methods and tools originally used in private sector is highly satisfying in the public sector (New Public Management concept), it opens the door to working on New University Management concept based on the same principles (Zimny 2013, pp. 163-171).

This study aims not only at discussing how important it is for state technical universities in Poland to cooperate with socio-economic environment institutions. It also provides analysis of actual solutions to be applied in this area, including institutionalization of this collaboration and developing scientific, academic, and research offer for businesses.

Background, History, Review of literature

Development of knowledge-based economy concerns nearly every aspect of human life. In the last few years, it has been observed that the way of perceiving higher education has changed. The core idea of the Humboldtian model³ of higher education is a holistic combination of research and studies aimed at learning laws which govern the world. In this model, commercialization is considered a side effect not being in line with the fundamental mission statement, yet, being tolerated by the academic milieu. The Humboldtian model is being developed with the aim of establishing new forms of cooperation between science and economy. These activities result from the fact that higher education institutions have become open to economy and started to encourage academic staff, students, and doctoral students to undertake business activities. Hence, higher education institutions assume new responsibilities and are provided with new opportunities to influence local, regional and global economy. It is worth emphasizing that this phenomenon is truly multidimensional. What is, however, of great importance in the changes being made is that for state-owned universities, which frequently face financial problems, the cooperation with businesses may become an extra source of income. Moreover, it is worth mentioning that the purpose of higher education institutions remains unchanged, unlike the education services which nowadays need to be adapted to the needs of businesses and made more attractive to students (Łyszcza, 2013, pp. 39-40).

Nowadays, higher education institutions are regarded not only as suppliers of knowledge, skills, and qualifications but also (following from basic and, more advanced, professionally applied scientific research studies aimed at improving economy innovativeness) as leaders in knowledge development. Therefore, education sector, higher one in particular must not be considered in terms of educational services. Instead, it should be supported by ongoing development of research and innovation at Polish universities. Given the above, attention should be paid to how complex the relations between universities and their environment are - not only in terms of education, research, and innovation development but also in terms of how

³ The core idea of the Humboldtian model of higher education is a holistic combination of research and studies aimed at learning laws which govern the world. In this model, commercialization is considered a side effect not being in line with the fundamental mission statement, yet, being tolerated by the academic milieu.

effectively a modern higher education institution is managed. These relations may involve both cooperation and competition. They may be also reflected in more or less complex reciprocity between a university and entities being run in its environment (Pluta-Olearnik 2009, p. 11).

What needs to be considered in the contemporary approach to the role that a university plays in its environment is the entire complexity of external relations between the higher education institution itself and entities being run in its environment. This strategy emphasizes that universities' environment is approached subjectively, i.e. both external relations between a university and its immediate and remote environment as well as resource flow between a university and selected institutions are analysed. Equally important is the internal aspect of how a university is run, which involves adapting relations within higher education institution to dynamically changing environment. Technically, it may be reflected, for instance, in bringing university management to professional level, establishing career centres, undertaking research aimed at gaining practical experience, specializing in a certain type of marketing activities, and undertaking initiatives aimed at establishing collaboration with selected entities within university's environment (Pluta-Olearnik 2009, pp. 12-13).

Higher education institutions must not be considered typical market entities and their scope of activities must not be aimed at making profit only as it would imply that their relations with the environment would translate into market exchanges. This would mean that universities purchase education as well as scientific and research services from scholars, lecturers and scientists and sell them to, for instance: secondary school graduates taking part in admissions and their parents; adults interested in broadening their knowledge; businesses interested in R&D services; public institutions purchasing knowledge as publicly available commodity. (Minkiewicz 2003, pp. 33-34). As selected services offered by universities are provided on payment-free basis (public services), relations between higher education institutions and environment entities are far more complex.

As indicated by A. Minkiewicz (Minkiewicz 2003), the group of stakeholders using services provided by higher education institutions includes both direct and indirect learners as well as intermediaries between universities and state entities. Therefore, partners of higher education institutions include: the state and its bodies responsible for collaboration (the right ministry, public administration bodies operating within confines of a certain region, and local government bodies); customers purchasing education services (learners and persons paying for education), (businesses interested in new technologies, business environment institutions), entities providing financial resources to universities or activities they undertake. Other authors emphasize that professional self-governing bodies, labour market institutions, social institutions, media, other higher education institutions (Polish and international) as well as secondary schools also fall within the said group of stakeholders.

Nowadays, social, economic, demographic, technological and cultural changes result in new challenges being posed. The present model of the economy is based on utilization of knowledge and experience and, hence, it triggers faster progress in

technology- and organization-related matters. Additionally, it allows for using means of production more efficiently. When products and services whose value is based on knowledge are predominant on the market, businesses need to keep implementing innovative solutions in all fields of their activity. This, in turn, is strongly related with access to skilled employees and latest scientific achievements.

Successful cooperation of businesses and universities depends not only on the change of functions served by higher education institutions (improved market orientation) but also on: strong motivation and leadership, providing right tools and information, prevention of conflicts of interests, how long entities cooperate with each other, appropriate communication model, graduate profile, ways of communicating with students, support of government institutions (Bryła 2012, pp. 14-19).

Beneficiaries of collaboration between universities and businesses can be grouped in four fundamental categories, i.e.: academic institutions, students, graduates, and businesses. Given this categorization, there is a great number of various benefits resulting from the cooperation between universities and business environment entities. Advantages of the first group (academic institutions) include – for instance – certain financial benefits, employers and prospective employees being more aware of the university and its brand, quality of teaching and academic/scientific research being enhanced, and legal liabilities being acknowledged. Students, however, benefit from increased chances of being employed after graduation, receiving remuneration for doing commercial jobs, internship and professional training opportunities, as well as establishing and developing business relations. Further, what is useful for graduates is not only personal satisfaction and financial profits but also career development. Finally, last but not least, entities which enjoy most benefits from the collaboration are businesses, falling under the last group of beneficiaries. These advantages include in particular: reducing costs and risks involved in running business, improving quality of human resources being employed, using universities as pools of new ideas, promoting partner's brand image, fostering relations with academic environment and, hence, developing new products and services (Bryła, Jurczyk, Domański 2013, pp. 14-19).

As the relations are complex and, thus, there is a need for finding optimal conditions for encouraging cooperation between partners (university and socio-economic environment), it is possible to apply the triple helix model. As indicated by L. Leydesdorff and H. Etzkowitz (Leydesdorff, Etzkowitz 2001), the triple helix model of innovation refers to a set of complex interactions between three types of entities: universities, industry, and government. The strength of the cooperation between these entities depends on the interactions between them. In the event of no interactions being present, the flow of knowledge would be impeded.

The triple helix model is based on knowledge infrastructure and it is intertwined with overlapping institutional areas, whereby each area serves different functions and interacts with hybrid institutions. Moreover, as the links of the triple helix can perform their functions interchangeably, it is of great importance to emphasize that it is possible to transform tasks and functions fulfilled by universities, businesses, and government bodies. For instance, a higher education institution can serve an industrial function by supporting new businesses set up in incubators. Further, the government

can also fulfil the industrial function by adopting financial programmes and making amendments to the existing legal provisions being in force. Conversely, it is also possible for the industry to serve functions originally fulfilled by an academic institution, i.e. development, training, and research. Networking relations falling within the triple helix model result in its links, although being independent of one another, changing into relatively autonomous institutions (Bojar, Machnik-Słomka 2014, pp. 99-111).

An important advantage of the triple helix model lies in the fact that it can be applied in a wide variety of research fields. It can be successfully applied to analyse the peculiar relationship between universities, businesses and administrative bodies as a form of a dynamic dimension of the knowledge-based system. The institutional setup in the knowledge-based innovation system may be also understood as an illustration of three sub-dynamic dimensions of competitive systems serving the same functions:

- Economic dynamics of generation who became wealthy through exchanges;
- Reconstruction and innovation dynamics based on knowledge;
- Political and managerial need and care for normative supervision and connections.

However, the aforementioned functions are served successfully not only when individual relations between science, industry and administration are established but also when these organisations ascribe new meaning to the said relations (Maciejczak, Muniak 2007).

A possibly widest group of stakeholders should be actively engaged in the economic development process. This, however, requires unanimous and close cooperation.

Research methodology

All state technical universities in Poland have been analysed. They all can be classified as one group. What is characteristic of this group is that technical programmes which are aimed at satisfying certain needs of the industry are predominant in this category.

In Poland, in the 2016/2017 academic year, there were 18 state technical universities supervised by the minister of higher education, 14 of which were referred to as 'polytechnics' and the rest as 'technical university'.

The analysis is divided into four parts:

- analysis of university statutes from the perspective of establishing conventions, their scope of duties and members of staff;
- analysis of statutes in terms of the members of staff of the conventions;
- analysis of cooperation opportunities offered to the economy by technical universities;
- detailed analysis of aspects falling within the scope of cooperation of the Faculty of Management in Czestochowa University of Technology.

Results and discussion

In the first place, university statutes were analysed in terms of establishing conventions, their scope of duties and their members. Although under the Polish law it is not obligatory to establish a convention, the principal purpose of this body is to provide strong support in establishing relations with stakeholders, i.e. the socio-economic environment of the university.

Only five out of eighteen technical university statutes fail to provide any regulations governing establishment of conventions. In statutes of three institutions it is provided that convention can be appointed within faculties, whereby two of these statutes stipulate that convention can be appointed not only within the university but also within each faculty separately.

The most common functions that Conventions serve include: expressing opinion on university's development plans (11 statutes), giving advice on which programmes should be launched (including postgraduate ones) to meet employers' needs (7 statutes), expressing opinion on the cooperation between university, businesses, and public administration bodies (8 statutes), expressing the needs for and opinions on carrying out research and innovation activities as well as creating laboratory facilities (6 statutes).

In the statutes having been analysed, the least common function served by conventions is co-participation in organizing and establishing auspices, filing applications for conferring honorary degree (*honoris causa*), as well as undertaking initiatives aimed at development of internship programmes aimed at graduating students (one statute only).

Further, statutes were analysed in terms of the members of the conventions.

Thirteen statutes provide that the members of the conventions can represent the following groups: state and local government administration bodies, businesspeople, representatives of employer organizations and self-regulatory organizations as well as representatives of academic, educational, creative, and trade institutions.

In three statutes, it is set forth that representatives of graduate and university supporter organizations are also permitted to be appointed convention members. This strategy is applied in the United States of America and aims at establishing relations between universities and socio-economic environment entities. The process is additionally stimulated by graduates strongly identifying with their Alma Mater.

It is also worth emphasizing that in six statutes it is set forth that members of staff employed in a given university are permitted to be appointed members of the convention. This not only reduces the possibility for appointing external members from the university's environment, but also results in the same members sitting in the senate.

In the second part of the analysis which was conducted by applying CATI method, i.e. computer-supported telephone interviews with university representatives, the authors collected data on how conventions work and function in each university. In two universities being analysed it turned out that no convention has been appointed, even though the statutes stipulate otherwise. This translates into conventions being run in only 11 universities, out of 18 being analysed in total. In five universities,

conventions meet once a year, in four - twice a year and in one higher education institution - once a quarter. Majority of respondents is of the opinion that convention sessions are of symbolic nature and are organized along with regular events taking place, e.g. immatriculation, end of academic year, patron saint's day. Moreover, the sessions frequently boil down to university authorities presenting information on university's standing. Members of the convention do not express their opinion on development directions for the university, even though this is the fundamental function of this body.

The respondents representing universities, where apart from university conventions also faculty conventions are being run, expressed positive opinion on faculty conventions. They referred to these bodies as giving professional advice on important matters and providing ongoing support for faculty authorities - both in terms of expressing opinion on opening new programmes meeting employers' needs but also in terms of cooperating with the industry in scientific research and testing technological solutions by faculty experts. This situation is undoubtedly related to the fact that convention members include industry experts whose profiles match specific faculties.

In the third part, the authors studied information available on universities' websites (accessed on 27.03.2018) to analyse cooperation opportunities which technical universities offer to businesses, e.g. expert base, making laboratory facilities available to businesses.

Sixteen higher education institutions offer services to businesses, whereby: 15 universities make their laboratories and research equipment available to businesses, 8 universities have expert platform (members of academic staff) where one can find each scientist's expertise to be used in cooperation between the university and businesses.

Moreover, in majority of universities a special organizational structure was created with the aim of establishing and developing cooperation between the higher education institution and businesses (technology transfer centres and business solutions offices).

The website of Humanist and Technological University in Radom provides, however, no information on business solutions being offered by the higher education institution in question.

Recapitulating the above part of the analysis it must be claimed that business solutions offered by technical universities (expert base, cooperation opportunities, making laboratories available to businesses) are presented in details and, hence, may encourage companies to enter into collaboration.

Given the above, one can ask about details of collaboration between socio-economic environment and the Faculty of Management in Czestochowa University of Technology.

In 2012, Business Representative Advisory Board was established in the Faculty of Management. Its members are asked for opinion on Faculty's offers – programmes being currently run, programmes to be launched, and postgraduate programmes. The Advisory Board consists of entrepreneurs and representatives of local government institutions, public bodies and private entities.

Given the fundamental activity of the faculty, i.e. teaching, the most significant fact is that the university opened—upon the order of TBS Housing Management Department—postgraduate programme in managing properties in public sector. The first group of students consisted of 40 participants, which proves that, unlike in other universities, the scale of this programme was considerable. The syllabus was consulted with the client and with the Business Representative Advisory Board. Therefore, the participants were provided with an opportunity to gain practical skills and knowledge which they would be able to use in their professions.

On a regular basis, the Faculty staff prepares programme offers for businesses, which include: consulting in IT system implementation, analysing and designing user experience, conducting statistical and econometric forecasting, evaluation of company's results and management by applying BOST methodology, employee satisfaction survey conducted by applying improved version of Servqual methodology, analysis of machine wear and tear by applying TPM and PAMC coefficients, consulting in solutions applied in innovative automatic identification systems—with particular attention paid to radio frequency identification (RFID), marketing studies and analyses, specialist translation services, laboratory analyses focused on investigating mechanical and use-related and quality features, digital rheometry and viscosimetry.

Moreover, the members of the faculty staff deliver lectures and give presentations to primary and secondary school learners, participate (on a regular basis) in “The Young and Creative” project promoting entrepreneurial spirit among school learners in Czesochowa.

Conclusion

The presented analysis is of tremendous importance in view of implementing the new act – Higher Education Act – also referred to as the Science Constitution. Pursuant to the provisions of the Act, University Council will be an intermediary body connecting the higher education institution with socio-economic environment entities. It will be seated by members outside the academic milieu who will be responsible for, inter alia: adopting university's strategy, monitoring financial and strategic management of the university as well as nominating candidates for the post of university president.

Certainly, replacing conventions being currently optional bodies with a permanent and obligatory body will foster relations between higher education institutions and socio-economic environment entities. However, benefits of faculty councils (see: Faculty of Management in Czesochowa University of Technology) must not be forgotten and, therefore, it should be considered in the new act to appoint these bodies on obligatory basis.

Both in-depth analyses of the actual collaboration relations entered into by the Faculty of Management in Czestochowa University of Technology and the substance of offers prepared for businesses indicate that majority of companies use know-how developed by the University, particularly in terms of economic analyses and issuing innovation certificates. In the period being analysed, only few cases of using Faculty's laboratories and workshops were noted. It seems that is the collaboration in this field, i.e. making university laboratories and workshops available to businesses, may result in these businesses becoming more innovative and, therefore, in establishing real cooperation between the science and industry.

In the last several years, universities – in Poland in particular – have invested enormous amounts of financial resources in modern laboratory and workshop equipment used in a variety of fields. In the period of 2007-2015, Polish universities have spent over 30 million zlotys on implementing over 1400 different projects, including purchase of equipment for nearly 600 laboratories and workshops (www.nauka.gov.pl). However, it turns out that in most cases, businesses do not use the infrastructure being available. Presumably, this situation may be changed by providing the Polish body of law with mechanisms making the collaboration between science and businesses much easier. Therefore, this could result in the entities ensuring this cooperation being parametrised far better.

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V. PRODUCTION MANAGEMENT

REDESIGN OF SUPPLY CHAINS IN THE FACE OF THE TREND FOR NATURAL AND ORGANIC COSMETICS

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Abstract: Despite the fact that the cosmetics industry is expanding rapidly today, it is still a rare subject for management studies. The aim of this work is to identify the impact of the global trend of increase of natural and organic cosmetics on the supply chain redesign in terms of processes and supplier base architecture. The assessment of supply chain reconfiguration was carried out using SCOR and GSCF models. First, the structure of the supply chain of a standard care cosmetic was mapped. The research results show that the natural and organic cosmetics are usually developed with the use of expected standards. These technical documents promote the design of sustainable supply chains and that, due to the modifications in the composition of cosmetics, both farms and wild areas are becoming increasingly important. The author highlights that these changes have resulted in the challenge of ensuring the availability of natural and organic raw materials. Due to the formation of global supply chains of new cosmetics, suppliers of natural and organic materials located in developing countries, increasing number of natural disasters and newly-implemented regulations on biodiversity, this may become ever more difficult. The work consists of several theoretical and research sections.

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Key words: supply chain redesign, reconfiguration, new product development, natural and organic cosmetics, eco-product, sustainability

Introduction

The cosmetics industry is a science-driven industry (Risk & Policy Analysts Ltd. 2016, p. 5), constantly developing and introducing a number of product innovations. According to Euromonitor International, in 2009, patents for cosmetics accounted for about 10% of all patents granted in the EU (Cosmetics Europe 2010, p. 24). Most large cosmetics manufacturing companies in Europe spend between 1.5% and 4.5% of their annual turnover (sales) on R&D of products (Risk & Policy Analysts Ltd., p. 26).

The aim of this work is to identify the impact of the global trend of developing natural and organic cosmetics on the supply chain processes and supplier base architecture. The processes that are taken into account in the identification of these changes are the basic processes pointed to in the Supply Chain Operations Reference model (SCOR). In addition, the supplier base architecture is defined as an upside supply chain network structure as understood from the Global Supply Chain Forum model (GSCF).

This work consists of several sections. In the first, it presents the standards for cosmetics as well as cosmetics value chain and the structure of supply chain of a standard care cosmetic. Further, it provides the specificity of the development process of cosmetic products. The methodology part briefly presents the research assumptions, whereas the next sections present the qualitative assessment results discussion and conclusion.

Standards for cosmetics

The cosmetics industry is rapidly changing as a result of strong global trends, one of which is the fashion for organic components (Czerniak and Sipiński 2017, p. 22). Along with its development, various European organizations offering certification of natural and organic cosmetics have begun to appear in Europe: BDIH (Germany), Cosmécio (France), ECOCERT (France), ICEA (Italy), Soil Association (United Kingdom), NATRUE (Belgium) (Newerli-Guz 2012). They have jointly (COSMOS-standard Association Internationale Sans But Lucratif) created the European Cosmetic Organic Standard, which integrates previous national regulations (COSMOS-standard 2013). The association also issued guidelines on interpreting the technical points and criteria of the COSMOS-standard (COSMOS-standard Technical Guide 2017) and a guide on how to satisfy the minimum requirements for labelling products (COSMOS-standard Labelling Guide 2017).

Recently, the International Organization for Standardization issued global guidelines on definitions for natural and organic ingredients (ISO 16128-1:2016) and global guidelines on the criteria for natural and organic ingredients and products (ISO 16128-2:2017). In Europe, the safety of cosmetics is governed by the Regulation (EC) No. 1223/2009 of The European Parliament and of The Council on Cosmetics. There is only one harmonized standard covering good manufacturing practices of cosmetics (EN ISO 22716:2007). Nevertheless, there is still no legal definition of natural, organic or eco-cosmetics.

The standards for the cosmetic industry provide requirements on the composition of natural and organic cosmetics and the requirements for performing particular value adding processes.

Cosmetic product development – theory background

A cosmetic product means “any substance or mixture intended to be placed in contact with the external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours” (1223/2009).

Various groups of cosmetic products can be distinguished, e.g. cosmetics for the skin, body and face, cosmetics for children, cosmetics for sun care, depilatory

cosmetics, hair care cosmetics, colour cosmetics or perfumes and deodorants (Czerniak and Sipiński 2017, p. 7). Natural and organic products are usually developed with the use of listed standards for standards.

The cosmetics industry is developing fast. For example, in 2015 year, the global cosmetics market grew by 3.9% (EY 2016, p. 43). Research and the introduction of a new cosmetic to the market can take more than 5 years (Risk & Policy Analysts Ltd., p. 26). According to the Dr Irena Eris company, a product lifecycle in this industry is getting shorter, and for some products it is about two years (4pm.pl. 2013). Cosmetics are products which are not particularly complex (consisting of about 20-30 constituents) and new developments in this field are mainly connected to specific ingredients (Figure 1).

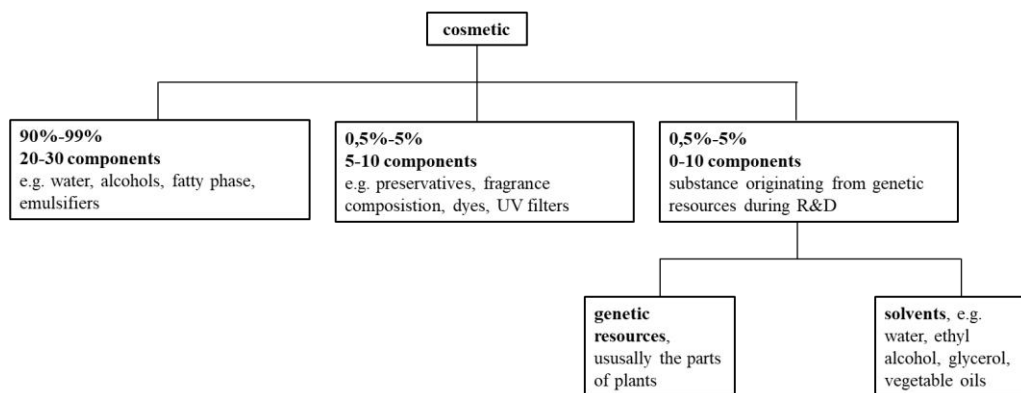


Figure 1. Simplified Bill of Materials (BOM) of a care cosmetic

Source: own elaboration based on Sikora 2008, Tumanowicz 2013, p. 8

Cosmetic components can be divided into chemical substances and natural substances which are genetic resources or their derivatives. More and more companies replace commonly used chemicals and synthetic ingredients with organic inputs and it is observed that natural cosmetics have expanded in many segments of the cosmetics industry (EY 2016, p. 43). The idea of creating preparations based on purely natural ingredients arose in 1996, when the European Scientific Cooperative on Phytotherapy at the EU Council Public Health Committee defined a natural cosmetic as “product aiming to beautify and provide skin care using natural ingredients, skin and environment friendly, health conducive, body self-regulation supporting and helping long-term natural beauty preservation and balanced development of body and soul” (Sulek et al, 2015). The R&D of a new substance originating from genetic resources is a four-stage and long-term process (Figure 2), involving many links from the supply chain.

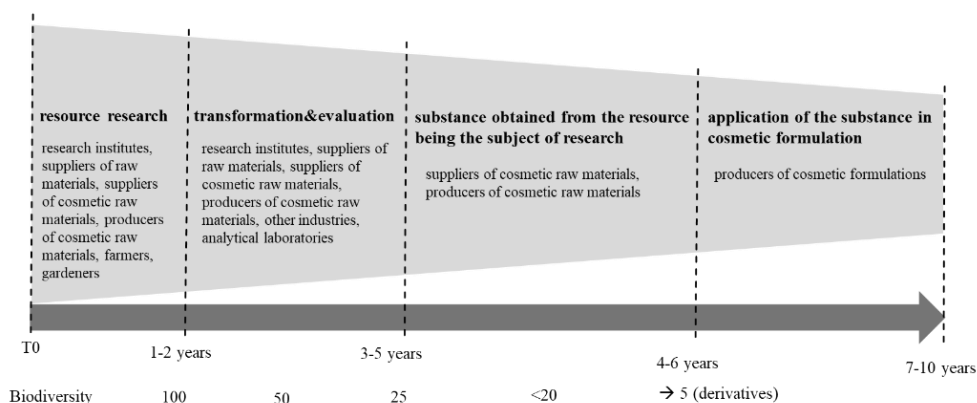


Figure 2. R&D stages and organizations involved in the development of a new ingredient of cosmetic product

Source: Tumanowicz 2013, p. 11-12

The first phase includes both sampling and recognition of interest in the resource. The next involves laboratory tests during which the resource is processed, transformed and evaluated in terms of its toxicity and the possibilities of its use in industry (not only cosmetics). In the next phase, the target substance is separated from the resource and detailed research work is conducted, e.g. raw material synthesis, its industrialization and technical documentation preparation. At the concluding stage, the final component of the cosmetic is developed, which consists of only around 5% of the original resource (Tumanowicz 2013, p. 11-12).

Supply chains of cosmetics

The cosmetics value chain consists of several stages. The first stage includes suppliers of raw materials, e.g. manufacturers of ingredients, manufacturers of packaging components as well as R&D organizations that perform market research, form product formulas and industrial design. The next stage comprises the manufacturers of finished cosmetics. The production is supported by different activities, e.g. marketing, IT, accounting or legal services. Next, the distribution and wholesale and finally the retail sales are accomplished. The cosmetics in the B2C market can be purchased in drugstores, grocery stores, pharmacies as well as beauty salons (Cosmetics Europe 2016, p. 16; Lipiński 2017, p. 20; Czerniak and Sipiński 2017, p. 8). Recently also e-commerce is becoming a very popular sales channel, especially for natural and organic cosmetics.

The supply chain structure is determined especially by product characteristics (Table 1). The upside supply chain is not very complex what results from the low complexity of cosmetics products. The number of tiers of suppliers depend on the type of an ingredient, what is normally reflected in BOM. Figure 3 presents the supply chain of an exemplary mass cosmetic.

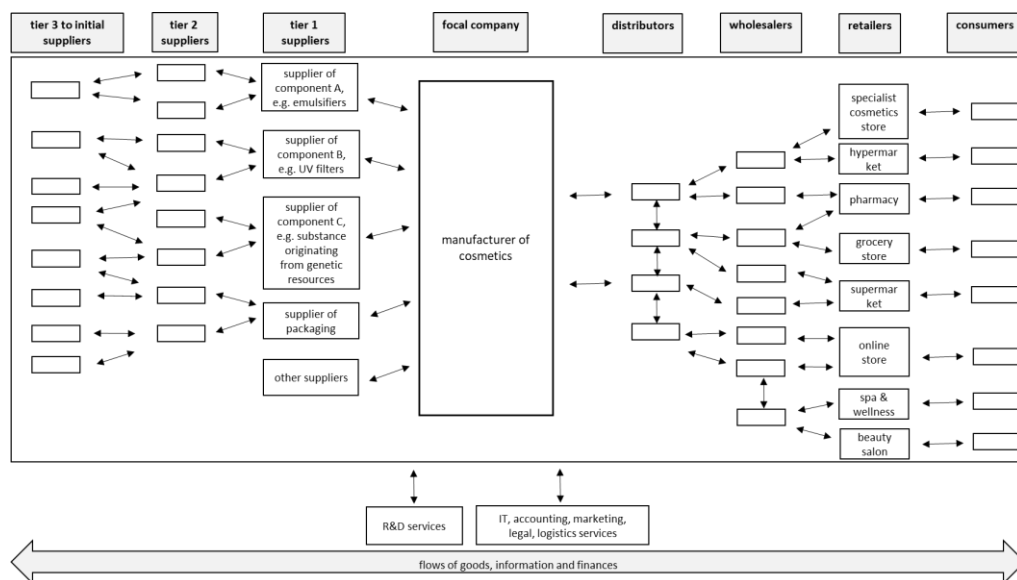


Figure 3. The example of the structure of a care cosmetic's supply chain

Source: own elaboration based on Cosmetics Europe 2016, p. 16; Czerniak and Sipiński 2017, p. 8; Sikora 2008; Lipiński 2017, p. 20; Tumanowicz 2013, p. 8

The first, second and next tier suppliers in cosmetics supply chains operate in such sectors as chemicals and chemical products other than cosmetics, rubber and plastic products or paper and paper products (Lipiński 2017, p. 20). They can be both manufacturers and distributions. Among the suppliers of raw materials there are also variety of farmers and growers.

One of the main supply chain links is the supplier of carton packaging (unit and collective). It may cooperate with such partners as: the supplier of inner, the supplier of outer, the supplier of cardboard box and the supplier of blister (Wieteska 2018).

The supply chain leaders are usually the producers of finished cosmetics. For example in Poland, the following largest domestic manufacturers may be listed: Ziaja, Eveline, Dr Irena Eris, Inglot and Oceanic (Czerniak and Sipiński 2017, p. 9). However, companies may also have their own distribution networks, e.g. Yves Rocher.

Cosmetics are included in the Fast Moving Consumer Goods sector. The professional cosmetics are sold in the B2B market to the beauty salons. The distribution channels for mass cosmetics are relatively long and complex. They consists of both wholesalers and retailers. For instance, the biggest retailer's network in Poland is Rossmann (Czerniak and Sipiński 2017, p. 7-8). Finally, different logistics service providers can be distinguished in cosmetics supply chains. They mainly perform packing, transportation and warehousing processes (Lipiński 2017, p. 20).

Supply chain strategy is determined especially by supply chain attributes (Mason- Jones, Naylor and Towill 2000; Witkowski 2010, p. 60). The examples of

attributes of cosmetics supply chain are presented in a table 1. Their descriptions refer to the mass and mature products and to the focal company perspective.

Table 1. Attributes of cosmetics supply chain

Attribute	Description
product	integrated product architecture, low price, low complexity, low variety, fast moving consumer good
demand	constant demand, easy to forecast
product life cycle	shortening (due to the growing rate of technological change and ecological trend)
production environment	make to stock
main customer driver	price
profit margin	low

Source: own study

Gattorna and friends (2009, p. 61-66) distinguish the four main supply chain management strategies: lean, agile, continuous replenishment and fully flexible. Based on the above product characteristics, type of demand and production environment, it can be deduced that the dominant management strategy of cosmetics supply chains is lean and/or continuous replenishment.

Methodology

This work is a result of the project “Flexibility in relationships with suppliers in terms of supplier-purchaser models of cooperation on product development in the B2B market”, no. 2016/21/B/HS4/00665, financed by the National Science Centre (NCN) in Poland. The main scientific objective of this project is to identify the dependencies between flexibility in relationships with suppliers and models (types) of supplier-purchaser cooperation on product development. As part of the qualitative research, the author decided to identify product development processes for various industries. This study concerns the cosmetics industry. The inspiration to carry out this study was a visit to the 21st BEAUTY FORUM Fair in Poland, where the author had the opportunity to conduct several interesting conversations with Polish manufacturers who had decided to offer certified products.

In the research, the author decided to confront the issue of supply chain redesign within the observed green trend in the cosmetics industry. For this purpose, the requirements of standards for cosmetics and two models of supply chain management were used. The SCOR model provided the classification of the main supply chain processes, which are (Supply Chain Council 2012, p. 6):

- plan;
- supply;
- make;
- deliver;

- enable and
- return.

The GSCF model allowed the formulation of conclusions about supplier base reconfiguration. The supply chain framework developed by Lambert and Cooper (2000) consists of three areas:

- supply chain network structure (“who are the key supply chain members with whom to link processes?”);
- supply chain business processes;
- supply chain management components.

This research concentrates on the first area, specifically in terms of a number of tiers of suppliers and the number of suppliers for each tier.

Supply chain design combines product design issues with the design of supply chain processes and structure (APICS, 2014). Van der Vorst and Beulens (2002) point that chain configuration (structure, facilities, means, parties involved and the roles in supply chain) is the element of supply chain redesign strategies. Supply chain redesign is understood, for the needs of the study, as the implementation of changes in terms of supply chain structure, processes and resources. The assessment of supplier base reconfiguration was conducted in terms of the type, number, localization of suppliers and distance between the supplier tiers.

The impact of developments in natural and organic cosmetics on supply chain processes – research results

Today's standards in the cosmetic industry vary in their restrictiveness and address different sectors. However, they all impose similar requirements regarding the supply chain - concerning not only the composition of cosmetics, but also the manufacturing and logistic processes, e.g. storage, packing, transportation. The table 2 presents the examples of requirements for each supply chain process with the use of SCOR model. All standards provide clear information on the substances that are allowed or not. On the one hand, they regulate the origin and processing of ingredients, while on the other, they provide information on the composition of final products, including the issue of labelling. Standards in cosmetic determine production and distribution processes, emphasising the need to reduce their negative impact on the natural environment through minimizing energy consumption, harmful emissions and waste.

The standards also promote the eco-design of cosmetics, recommending biodegradable packaging and avoiding substances (e.g. plastic microbeads) that are dangerous for the marine environment in wash-off cosmetics (Cosmetics Europe 2017, p. 42). The European standard COSMOS defines the critical roles for business practice:

- “promoting the use of products from organic agriculture, and respecting biodiversity;
- using natural resources responsibly, and respecting the environment;

- using processing and manufacturing that are clean and respectful of human health and the environment;
- integrating and developing the concept of Green Chemistry” (COSMOS-standard, p. 4).

The next section refers to the redesign of cosmetics’ supply chain structure.

Table 2. The examples of cosmetic standards’ requirements with regard to SCOR supply chain processes

SCOR process	The example of requirement	Standard
Plan	Range of product is a category of products, possessing common or similar characteristics, and which can be grouped together for planning and/or marketing purposes (definition)	ECOCERT
Supply	It is forbidden to use plants or plant materials that have been genetically modified and primary raw materials extracted from living or slaughtered animals	COSMOS
Make	Environmentally-friendly production methods	BDIH
Deliver	If at all technically feasible and available, recyclable packaging materials are to be used	NATRUE
Enable	The traceability of ingredients up to the finished product and finished products up to consumers must be rigorously implemented	ECOCERT
Return	As part of the environmental management plan, a waste management plan must be put in place which addresses manufacturing waste, including gaseous, liquid and solid waste	COSMOS

Source: own study based on BDIH Guidelines for Certified Natural Cosmetics (2012, p.1), COSMOS-standard (2013, p. 9), ECOCERT standard (2012, p.13, 25), NATRUE Label (2017, p. 7).

The impact of developments in natural and organic cosmetics on supplier base architecture – research results

The development of products that meet the requirements of cosmetic standards is strongly connected with ensuring a specific composition (Table 3). The product changes relate to all three groups of components (Figure 1) and especially concern the replacement of chemical substances with natural ones (in a specified amount that must be obtained from certified farms or suppliers).

Changes in the design of products mean the increased need for cooperation with the suppliers of natural and organic materials and certified ingredients. Referring to the GSCF model, it can be noted that such eco-improvements lead to reconfiguration of the supply chain, not only for first but also initial tier suppliers. A more detailed investigation of product changes leads to many interesting observations. The following can be made with reference to first/second tier suppliers:

Table 3. The percentage share of natural and organic ingredients in products that are certified by ECOCERT

Ingredients	% of organic plant ingredients and organic ingredients from plant origin on the total of ingredients validated as plant	% of certified organic ingredients on the total of the ingredients making up the finished product
Type of cosmetic		
natural	minimum 50%	minimum 5%
natural and organic	minimum 95%	minimum 10%

Source: own study based on ECOCERT standard (2012, p. 20-21).

- an increased number of suppliers (manufacturers or distributors) of natural and organic materials;
- an increased number of suppliers of recycled materials;
- an increased number of suppliers of eco-friendly packaging;
- a decreased number of suppliers of chemical materials;
- an elimination of some suppliers (e.g. suppliers of parabens, SLS, SLES).

The changes among direct suppliers are related to the changes among initial tier suppliers. Therefore, the following modifications can be identified in terms supply chains of natural and organic cosmetics:

- an increased number of farms and certified farms;
- an increased number of genetic resources obtained from plants that are under protection and come from wild areas;
- an increased number of initial suppliers located far from production sites due to using novel and attractive cosmetic components. For example, Skalińska-Najdenow (2001) refers to acquiring raw materials (vegetable oils) from America, Africa and Australia.

Discussion and conclusion

Developments in natural and organic cosmetics are not only focussed on consumer satisfaction, but also the whole product lifecycle. The observed fashion for the use of natural and organic components forces companies to make changes in the composition of cosmetics. This triggers modifications not only in the portfolio, but also in design of upper supply chains of the new, improved products.

The impact of the development of natural and organic cosmetics is undoubtedly significant, both for the supply chain processes and supplier base architecture. The introduced cosmetic standards stimulate sustainable production, distribution and consumption. This allows the inclusion of certified cosmetics in the group of green products (Durif, Boivin and Julien, 2010).

However, when launching these products, specific threats and challenges for the redesigned supply chains appear, which need further research. Primary among these is the fact that the supply chains of natural and organic cosmetics have become in many

cases global. This may cause an increase in the distance between supply chain links and consequently longer lead times. Along with these changes, other increased risks can be identified: an operational risk (damage, pilferage) for supplies (or components) during the extended transportation processes as well as a risk coming from the macro environment (e.g. political, economic, social) for supply chain links located in different countries. Longer transport processes require larger stocks, what is also linked with additional warehousing costs and other risks e.g. the risk of commodity obsolescence or deterioration.

Furthermore, appropriate certified farms are becoming key links of the supply chains of natural and organic cosmetics. An increase in dependence on this type of entity could escalate the supply chain's vulnerability in the light of climate change and increase in the number of natural disasters.

The location of farms also determines the supply chain challenges related to the regulations on biological diversity and access to plants under protection. The industry standards stress ensuring traceability, which must be treated as another challenge, especially in terms of managing global supply chains. In addition, in terms of distant suppliers, especially those located in developing countries, the issue of transparency has gained greater importance.

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USE OF IT TECHNOLOGIES IN THE CALCULATION OF THE TECHNOLOGICAL PRODUCTION COST CONDUCTED - A CASE STUDY

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Abstract: The objective of the article is to present unit production cost calculation mechanism using subtractive calculation. When using the functionality of IPOsystem™, the author of the article tested the manner of cost calculating in a selected a Polish company producing highly specialized machines and technical devices, manufactured at the client's request and according to the recipient's specifications. There are described the ways of presenting the profit and loss accounts, allowed under Polish law, and discusses the way of conducting an ex ante and ex post analysis of calculation deviations. Using an example of implementation, there is described the method of settlement of direct material and labour costs and to present the calculation algorithm of unit cost of production, implemented in IPOsystem™, enabling the valuation of the main product, by-product and repairable production waste. As the main advantage of the solution, the author indicates availability and timeliness of source data describing the various components of the costing system, which was obtained through the current registration of events, continuous updating of product manufacturing technologies and ensuring integration with selected ERP class systems.

Key words: application, cost structure, direct manufacturing cost, subtractive calculation, unit production cost calculation

Introduction

One of the criteria for assessing the profitability of production companies is an analysis of the production costs. The calculation of a unit production cost is not only the basis for verification of the decisions taken by the management personnel and senior management team in respect of price policy, but also an element of the registry of tangible components of current assets kept in accordance with the Accountancy Act (Ustawa 1994). It is obvious that organising an efficiently functioning decision making process in terms of strategic and operational production planning (Milewska 2016) is conditioned by the data on the calculation components being available and up to date. Currently, the foundation of managing the business process of a company and the condition for integrating economic activities is the use of IT systems enhancing the company's information flow, data processing and cause-and-effect relation analysis. Due to the above, the paper will present an example use of a IT tool facilitating the calculation of a unit production cost¹.

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Company's operating costs

Costs are created as a result of purposefully utilising the resources available in an organisation, allowing the company to gain profits in form of goods or services (Świdorska 2010). They represent a value expressed in currency. The basic definition of costs can be found in the legislature (Rozporządzenie 2008; Ustawa 1994), which describes them as a probable creation of economic profits in a reporting period, with a reliably determined value, in form of decreasing the value of active assets or increasing the value of obligations and reserves which lead to a decrease in equity capital in a way other than a withdrawal of funds by shareholders or owners. Costs are an element of the profit and loss account of a financial report of business entities.

Two alternative ways of presenting a profit and loss account are allowed in financial reports of Polish businesses in respect of operational activity (Matuszek 2003). Grouping of positions can be done in a by nature of expenditure format, otherwise known as by type of expenditure format, or in a by function of expenditure format. The components of both cost systems are described in detail in (Milewska 2016).

The factor which heavily influences the choice of format is the structure of a company's chart of accounts. It is responsible for organising the register of economic events in accordance with the law, conditions of the industry and the Management's needs. It is also a tool for analyses, making it possible for the reports to reflect: the frequency and degree of influence on gaining profits or incurring losses, and the predictability of economic operations. For most business entities it is possible to show information in both formats, where the values of income and costs overall must be identical. Each of the formats caters to different needs. The nature of expenditure format is useful for making prognoses of cash flows, while the function of expenditure one generates information pertaining to the profitability and cost creation of individual organisational units and segments of the business entity (Milewska 2016).

Unit production cost

The financial result of a production company presented in a function of expenditure format requires a production cost calculation to be conducted in two time-related approaches:

- ex ante, i.e. before starting production, where the calculation result is a cost prognosis;
- and ex post, after the production is finished, where the result constitutes an assessment of the work.

Ex ante calculation is based on norms and technical and economic indicators, and is indicative in nature. It is conducted in order to submit a tender to the buyer or compare alternative variants of production processes using the company's various resources. It is important not only due to unexpected changes in demand, but also due to shortages of direct production materials used in the manufacturing process.

Ex post calculation, on the other hand, reflects the actual costs incurred connected with the consumption of assets and human labour, estimated on the basis of accounting documents. The documentation of a company's resource consumption consists of: a tangible assets amortisation plan, salary sheets and material consumption register. The indirect costs are determined as a result of actions including:

- gathering information pertaining to the amount of all the costs incurred,
- identifying the cause and effect correlations between materials consumed and cost elements,
- defining the basis for cost division,
- determining the unit production cost.

The way costs are grouped together and the structure of the calculation algorithm depend on the branch and organisation of the production process as they do influence the way economic event registers connected with resources consumption are kept. More detailed recording improves the accuracy of analyses and increases the reliability of the calculation result. At the same time, however, it increases the costs associated with data collection and prolongs the wait time for the final result. That being said, less detailed recording can lead to a lack of unequivocal identification of the cost creating factor and result in a subjective appraisal of measures taken in regard to the objects analysed. Forming the methods of common cost allocation (Chmielewski 2009; Cooper 1987; Drury 1992; Milewska 2016) is a compromise between the accuracy of the model and calculation time.

An especially complicated issue, however, is calculation performed for business entities characterised by production with large diversity of the final products, variability of work and complexity of the technological processes. Companies with this specificity use, among others, additional calculation (Matuszek 2003; Nowak et al. 2004; Sobańska 2009). Calculating indirect costs of the calculation subject is performed using the notions of cost object and distribution key (Jaruga et al. 1999; Matuszek 2003; Nowak et al. 2004; Sobańska 2009).

An important role in the area of data collection and processing is played by IT systems. They facilitate both the process of creating and verifying the costs account model. Accurate identification of the cost drivers confirmed by an analysis of deviations of ex ante and ex post calculations is a factor which determines the reliability of the model.

Example of application of subtraction based costing

The subject of the study carried out by the author of the present article is a Polish company producing highly specialized machines and technical devices, manufactured at the client's request and according to the recipient's specifications. The company has implemented an ERP class system called Comarch ERP XL, integrated with the IPOsystem™ system, supporting the company's operations in the area of production management

Application infrastructure

IPOsystem™ is a product of UiBS Teamwork Sp. z o.o., based on the Microsoft SQL Server platform: Express Edition, Standard Edition or Enterprise Edition. The functionality of the system includes planning, controlling and recording production activities. Data that is collected, processed and shared by IPOsystem™ describes both workflow and material flow. The tool enables production scheduling, taking into account the availability and efficiency of the company's resources. The allocation, that is assignment of a direct production worker to the workstation in order to carry out a specific technological operation at a designated time using the selected material, is carried out autonomously. The process of creating plans is fully automated, initiated periodically and triggered after reaching the declared boundary conditions. They are described by correlated coefficients of determination, which represent the relationship between the current course of production activities and the expected results, included in the previously generated production plan. The adaptation of computational algorithms to the company's needs takes place through the configuration of global system parameters. Due to the dynamically updated schedule, systematic mapping of process limitations is a particularly important issue. These include refitting, limited work space (e.g. furnace input capacity, storage area) and many more. The validity of production plans is ensured by the successive registration of events. IPOsystem™ forces direct production employees to keep up-to-date records of the start and end of technological operations. It also allows the possibility of registering the quantity of semi-finished products leaving the work station, and the number of defects for which a classification consistent with the client's requirements is used. Reporting of completion and issuing of the work order for the operator takes place via the terminal. It recognizes the worker through the RFID proximity identifier operating in the Unique 125 kHz system.

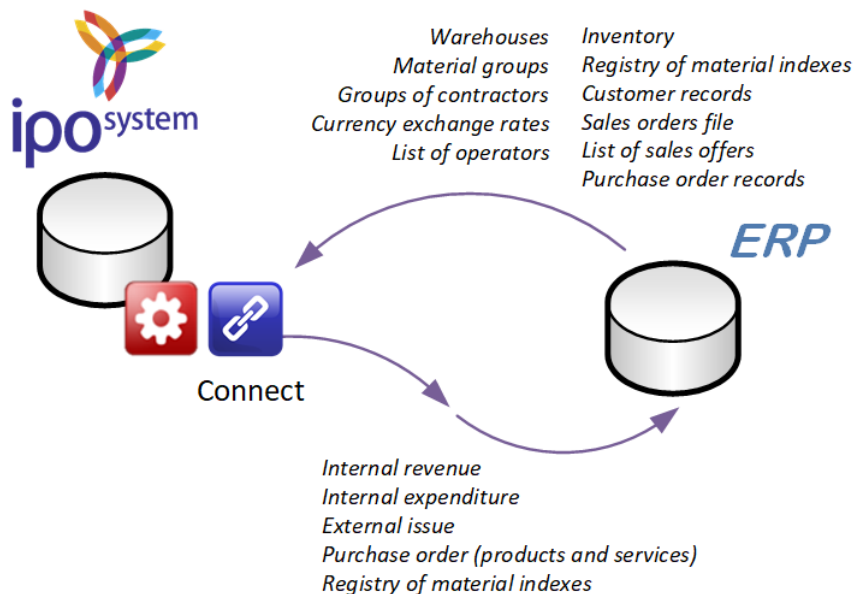


Figure 1. Scope of integration of the Comarch ERP XL system with the IPOsystem™

Source: own elaboration

An extremely important element of the described solution is the integration of the ERP class system with the IPOsystem™. The flow of information between systems takes place in an automated way, enabling comprehensive management of the company's business processes. It includes two-way data exchange and takes place at a frequency of several minutes. Synchronization was configured using the Connect component. The described solution includes data exchange in the scope shown in *Fig. 1*. Data validity not only guarantees the tracking of the current progress of manufacturing works, but also constitutes the basis for the creation of production plans.

Technological production cost calculation

In the company described, subtractive (residual) calculation is used. It has application in conjugated production (also known as combined or correlated), as a result of which three types of products are produced simultaneously from one raw material:

- a main product whose production is the primary purpose of the company's operation;
- by-product, created accidentally, having a certain utility value, that can be sold or used for own needs;
- production waste — a worthless product requiring disposal or repair.

Calculation of production costs is conducted on an object, that is the production order. If it covers one product, then the unit cost is determined using direct division

costing. However, because IPOsystem™ allows for the mapping of complex conditions for manufacturing operations by allowing the assignment of many main products to one production order, in most cases the determination of unit costs takes place using coefficient division costing. The product cost calculation system of IPOsystem™ was built based on two components of direct costs and overhead in the form of general department costs. Direct costs are created by the consumption of direct production materials and direct wages. The calculation procedure implemented in IPOsystem™ includes:

- determination of direct material costs by:
 - determining the number and amount of material releases;
 - determining the amount of main product, by-products and production waste taken;
 - determining the costs of disposal of production waste;
- determination of labour costs;
- calculating the unit cost of producing the main product using simple division or coefficient costing.

Direct material costs

In IPOsystem™, the commissioning of a production order is conditioned by the release of all materials declared in its technology. During production operations, it is possible to register additional material consumption as well as return of excess material. However, only the material which was previously supplied may be returned. The return is made to the warehouse from which the material was previously collected, and accounted for based on quantity. If the order has been closed, it is not possible to return the material in IPOsystem™.

Acceptance of products from production is carried out in accordance with the proportion reflecting the mutual quantitative correlation between main products in the order. It is important that each of the main products can be accepted into any other warehouse. By-products of the process, in principle, do not require reporting. The completion of work on the order triggers automatic transfer of the by-product to the warehouse, in accordance with the declaration of quantity included in the order. The cost of producing a by-product is determined by IPOsystem™ based on the registration price, taken from the material registry. The value of a by-product that is entered from the level of the production order card can be declared manually.

The employee's post-completion report may also include reporting damage to the product, known as a shortage. In the case the order contains several main products, the number of registered shortages indicates the number of missing sets. In addition, the number of main order products is automatically reduced. There are two alternate ways to handle shortages: scrapping or transfer to a warehouse for quality control (Assid et al. 2014; Egorov et al. 2017; Hlioui et al. 2015; Kang et al. 2018).

Direct labour costs

The use of a terminal that alternately issues work orders and collects post-completion reports from employees is a solution that provides systematic information on the progress of manufacturing operations. Both the instruction and the report precisely define: time, operator and workstation related to the execution of the technological operation. The basis for labour cost allocation (direct wages) in the IPOsystem™ is time-consumption calculated by the number of manhours that have been included in the order's production technology. The planned labour cost of the order is the sum of the product of the execution time of a standardised technological operation assigned to the order, and the rate that is determined for the operation performed by an operator with specific qualifications. The actual cost is calculated analogically, except that the standardised time is replaced by the actual execution time. IPOsystem™, while evaluating the activities of employees of quality control and internal transport, does not take into account the competences of employees; for these operations a homogeneous rate was adopted. A special case are cooperative services. In IPOsystem™, the cost of cooperation is determined arbitrarily, it is independent of the duration of the service and the amount of material entrusted to the other party (Milewska, Skowron 2018).

Unit production cost calculation mechanism

The unit production cost calculation algorithm implemented in the IPOsystem™ is presented in the diagram below (*Figure 2*). Undoubtedly, the factor determining the correctness of the calculation procedure is the valuation of the final stock, art. 34 par. 1 point 2 (Ustawa 1994).

Calculation of the technical production cost takes place in two stages. As part of the first stage, products for which the production process has been completed are accepted to the output buffer of the IPOsystem™ system. The second stage is the synchronization of data with the ERP class system, during which internal revenue documents are created. They document the transfer of materials to the warehouse in accordance with the previously adopted product valuation method. Changes to the data describing the items in the buffer can be made. The update may include: changing the warehouse, changing the cost of production and removing the items from the buffer. The removal is treated as acceptance of the product without recording it in the ERP class system. Pending items in the storage buffer are treated, from the point of view of the accountant, as production in progress. Until they leave the storage room, the possibility of moving these items is blocked. Running synchronization creates internal revenue documents and empties the IPOsystem™'s storage buffer. It is conditioned by the confirmation of the unit cost calculation for each of the products. Receipt of products is carried out at the date of data exchange. Internal revenue documents are generated taking into account the grouping of items, the order number and the symbol of the receiving warehouse.

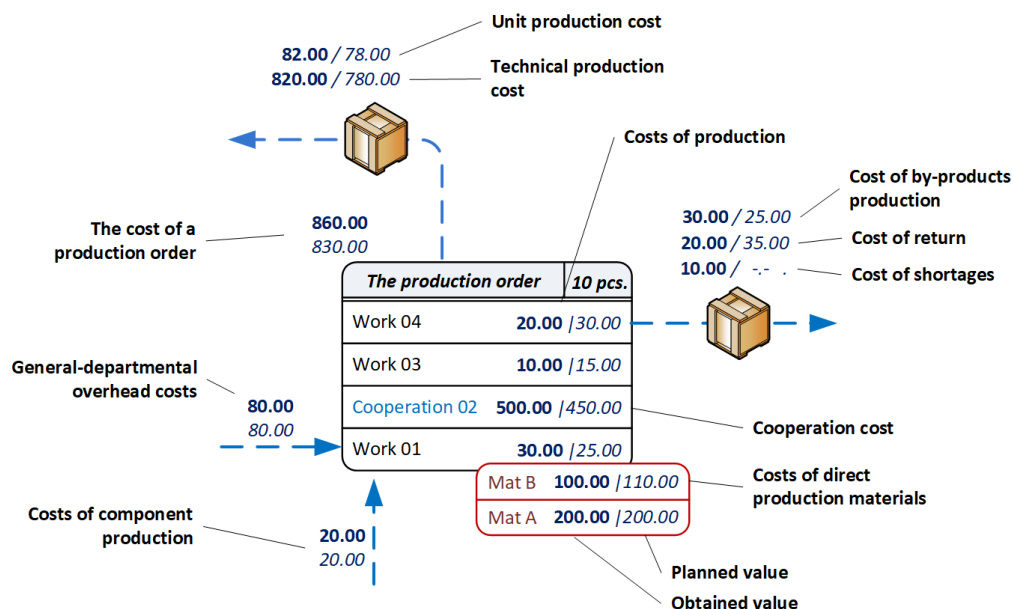


Figure 2. Components of production cost

Source: own elaboration

Summary

The resource which gives competitive advantage to today's companies is information. Its correctness, reliability and availability influence the quality of decisions. One of the basic pieces of information used in the decision making process are costs. An important role in the account of costs is played by recording activities. Accurate registering of event which makes it possible to perform calculations that take into consideration up-to-date source data improves the company's competitiveness on the market, increases the efficiency of economic processes and guarantees a quicker return on the invested capital for the owners.

The use of the IPOsystem™ in the area of production cost calculation contributes to increasing the accuracy and reliability of analyses. However, periodic verification of the assumptions made, the essence of which is taking into account the specific conditions of the company, may be necessary. The functionality of the IPOsystem™ makes it possible to perform calculations both ex ante and ex post. However, the most important element that explains the effectiveness of the solution implemented is the availability of up-to-date source data describing the individual components of the cost calculation format. Increasing the reliability of the account of costs model in the selected form, on the other hand, is achieved through:

- updating the selling prices of products by assigning a value obtained through calculations to the correct listing of the pricelist,

- conducting calculation deviation analysis in the ex ante and ex post formats for the selected calculation subject,
- periodically determining the trend of changes in material consumption and labour intensity of technological operations.

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MERGERS OF MEDICAL ENTITIES AS A RESPONSE TO THE RISK OF THE ACTIVITY

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Abstract: The aim of the article is to indicate the impact of merging medical entities on reducing the risk of their activity. The subjects of consideration are healthcare entities in the form of independent public healthcare institutions (SPZOZ) - hospitals. On the basis of the literature on the subject, legal acts and observation of the practice of functioning of these entities, one can formulate hypothesis that merging processes are a tool for reducing the risk of activity of healthcare entities. To verify this hypothesis, research tools such as the analysis of the literature on the subject and legal acts, observations carried out during the audit of financial statements and a case study were used.

Key words: public sector, health care, risk in management, mergers of health care units.

Introduction

Independent public healthcare unit - a hospital - is an economic entity defined by law as a healthcare entity which is not an entrepreneur. A hospital is defined as a company of a medical entity in which this entity performs medical activities in the form of hospital services. The rules of the hospital operation are specified in the Act on Medical Activity (Act on Medical Activity of April 15, 2011, Part 2) and the statute. The Statute may provide for leading specific organizationally separated activity other than medical activities. The statute is granted by the founding entity.

The activity of independent public health institutions (SPZOZ), especially hospitals, as the largest units of the health care system, requires thoughtful and planned restructuring decisions from plants and entities which creates the health care units. Their goal is to improve economic and financial conditions and improve the quality of health services.

The aim of the article is to indicate the impact of mergers of medical entities on reducing the risk of their activities. In the article significant modifications of the rules for the implementation of hospital connection processes, resulting from legal provisions, are indicated. These rules will allow in practice better use of connection processes to improve the condition of healthcare entities. Based on the literature on the subject, legal acts and observation of the activity of these entities, a research hypothesis can be formulated that "merger processes are a tool for reducing the risk of activity of healthcare entities".

To verify this hypothesis, such research tools as analysis of the literature on the subject and legal acts, observations carried out during the audit of financial statements and a case study were used. The subjects of consideration are health care entities in the

form of independent public healthcare units (SPZOO) – hospitals (in the article terms SPZOO and hospital are used interchangeably).

The article is an extended version of the study entitled "Risk management of healthcare units activity in the processes of their merger".

Background. Risk factors in the activity of health care entities

The risk can be considered as the result of uncertainty connected with all the external and internal factors affecting the malfunctioning of the system of health care delivery. Recognition of these phenomena, identification of the reasons for their occurrence along with the estimation of potential sizes, as well as the hierarchization of individual elements are indispensable conditions for selection, and sometimes creation of procedures and tools for managing this risk. B. R. Kuc (2002, p. 388) while defining the risk states that it is "the possibility or probability that the goal of the undertaking will not be reached, its result is uncertain". The impact of risk on the achievement of goals can be both positive (possibilities, opportunities) and negative (threats, barriers). The Ministry of Finance issued a statement on detailed guidelines for the public finance sector in the field of risk planning and risk management. The basic risk groups of the functioning of medical entities are (Announcement No. 6 of the Minister of Finance of December 6, 2012):

- a) financial risk,
- b) human resources risk ,
- c) activity risk,
- d) external risk.

Due to the specificity of healthcare units, it seems useful to distinguish financial risk and non-financial risk. These risks can occur together.

Since the separation of the SPZOO as independent health care units, they were exposed to unstable, unfavorable environmental conditions in which they had to operate. The health situation of the society, constant changes in legal regulations, and systemic changes have resulted in the fact that health care entities are characterized by uncertainty and risk of activity, in particular the risk of losing the possibility of its undisturbed continuation. Important factors directly affecting the risk of disruptions and unfavorable financial and property conditions include such negative phenomena as:

- a) indebtedness of hospitals,
- b) payment delays,
- c) lawsuits,
- d) employee tensions and protests, wage claims,
- e) negative equity values,
- f) negative financial results,
- g) lack of funds for restoring assets.

Non-financial risk is associated with the system of providing health services and their consequences. As operational risk, it depends on the quality of services provided. Deterioration in the quality of services results in negative consequences manifested by

claims for damages, litigation, loss of reputation, loss of contract with the funding body, loss of patient trust, reduction in the number of potential patients. Many of these effects translate into financial consequences - the emergence of costs and losses.

Results. SPZOZ – hospital as a management entity

Entities founding the SPZOZ are local government units, ministers, central government administration bodies or medical schools. Responsibility for managing the medical entity - the hospital - is borne by the manager. The working relationship with the hospital manager is established by the founding body. In the health care entity not being an entrepreneur - SPZOZ - operates the social council, which is the initiating and consultative body of the founding entity and advising body to the manager. The most important tasks of the social council are to present to the founding entity the conclusions and opinions on the following issues:

- a) the disposal of fixed assets and the purchase or acceptance of donations for new medical equipment and devices,
- b) transformation or liquidation, extension or limitation of operations,
- c) awarding prizes to the manager,
- d) termination of employment or civil law contract with the manager.

In the area of cooperation between the social council and the head of the unit, the tasks of the council include presenting conclusions and opinions on (Act of April 15, 2011 on medical activity, article 48):

- a) a financial plan, including an investment plan and an annual report on their implementation,
- c) bank loans or subsidies,
- d) distribution of profit,
- e) disposal of fixed assets and purchase or acceptance of donations of new medical equipment and devices,
- f) organizational regulations.

Independent public healthcare institutions, including hospitals, belong to public sector entities (Act of August 27, 2009 on Public Finances, article 9). As entities of this sector, using public funds in their activities, they are obliged to observe a number of principles, first of all public finance discipline. The entities of the public finance sector should fulfill the objectives of their activity in a lawful, economical, timely and effective manner.

The risk of operations, the negative consequences of this risk, are of interest to the management, social councils and entities founding the plants. SPZOZ as independent units, distribute the profit which they generate themselves or cover the loss of activity on their own. If they are not able to cover a negative financial result from the plant's fund, the founding entity is obliged to cover the loss in the amount not greater than the sum of the net loss and depreciation costs within 9 months from the deadline for the approval of the financial statements or make a decision within 12 months to liquidate an independent public health care unit (Act of April 15, 2011, article 59). One of the

forms of improving the economic and financial condition of a unit is the process of combining the plants.

Discussion. Mergers of medical entities in the light of legal regulations

The SPZOK mergers runs in accordance with the guidelines of the Act on medical activities of April 15, 2011. The principle of business mergers, contained in the Act on Accounting of September 29, 1994, does not apply to these processes. The regulations of the Accounting Act refer to the settlement and recognition of these mergers in the accounts of commercial companies. The mergers of independent public health facilities can be made by:

- 1) transfer of all property of at least one SPZOK (taken over) to another SPZOK (acquiring),
- 2) creation of a new SPZOK created of at least two merging SPZOK.

There may also be a situation of combining several SPZOK simultaneously and transforming them into a commercial company.

Entities founding independent public health care units may merge these units by regulation (when the forming entity is the minister, central government administration body or a voivode), ordinance or resolution (if the constituting entity is a territorial self-government unit) so depending on the legal status of the founding entity. This procedure takes place in the case of plants having the same constituting entity. If the merging plants have different forming entities (e.g. district, voivodship), the merger process requires an agreement between these entities. (Goździkowski 2012, p. 44).

The merger of the SPZOK takes place without conducting liquidation proceedings of the acquired entity or merging entities. On the day of deleting the acquired entity from the National Court Register, the acquiring entity enters into all legal relationships of which the subject was the acquired entity. When a new plant is created as a result of the merger, it enters into all legal relationships of which the merging plants were subject, regardless of the legal nature of these relationships.

SPZOK mergers may be a response to the difficult financial and property situation of the units (Klich 2013, p. 256) or they may be a form of rationalization of entities' operations and effective use of the resources of the system (Hass-Symotiuk 2011, p. 47). The merger initiative may occur on the part of the entities themselves or may be decided by the forming entities. Complex operating conditions of the SPZOK enforce restructuring activities, including mergers or transformations, which causes such economic effects as:

- a) more efficient allocation of plants' resources,
- b) rational use of the assets of the units,
- c) changing organization of plants: combining or dividing units of internal structure,
- d) savings in the area of operating costs, primarily administration,

- e) changing the model of operation of the plants towards a systemic approach to patient treatment¹.

The final answer to the question about the effectiveness of the merger processes is reached during the operation of the merged entities.

Mergers of hospitals as an example of reducing the risk of activity of medical entities

An example of an action that rationalizes healthcare in the Świętokrzyskie Voivodship was the connection of two hospitals:

- a) Provincial Specialist Children's Hospital named after Władysław Buszkowski in Kielce (acquired hospital) (hereinafter the Children's Hospital),
- b) Provincial Hospital Complex in Kielce (acquiring hospital) (hereinafter the Hospital complex).

The merger was based on the Resolution No. XII / 182/15 of the parliament of the Świętokrzyskie Voivodship of 10 July 2015 regarding the merger of the Provincial Specialist Children's Hospital named after Władysław Buszkowski in Kielce with the Provincial Hospital Complex in Kielce².

The reason for the merger, according to the voivodship parliament members, were such factors as:

- a) reduction in the demand for hospital services for children in connection with a negative birthrate and a deepening of this trend in the following years,
- b) shortening the period of hospitalization, which results in the unused potential of hospitals,
- c) poor technical condition of a children's hospital, requiring significant financial outlays for repairs,
- d) the necessity to use objects transferred to the Hospital Complex,
- e) incurring the construction costs of the hospital unit of the Hospital complex intended for the treatment of children, meeting the quality standards required from entities performing medical activities (Regulation of the Minister of Health of June 26, 2012),
- f) lack of financial resources for the construction of a new hospital.

The rationality of the consolidation process was confirmed by the development of the project of this merger by a consulting company. The implementation of the merger process required expenditures incurred by the local government unit (Świętokrzyskie Voivodship) in the amount of approximately PLN 40 million. These expenditures

¹ In one of the documents justifying the connection of the SPZOZ one can read: "The purpose of the merger and transformation of plants is to provide the existing range of medical services and to expand the availability of medical services, improve the conditions for their provision and quality of health services and the possibility of their development." http://edziennik.mazowieckie.pl/WDU_W/2017/9395/oryginal/akt.pdf (accessed at: 7.05.2018).

² Resolution no XII/182/15, <http://bip.sejmik.kielce.pl/dopobrania/2015/4233/uchwala.nr.XII.182.2015.pdf> (accessed at: 20.08.2018r.)

were almost by half lower than the previously anticipated amounts for the restructuring and renovation of the Children's Hospital (PLN 72 million).

The benefits of the merger included:

- a) increasing the complexity of pediatric services within one hospital,
- b) increased availability of specialist doctors,
- c) increasing the availability of the location of the hospital, equipment and apparatus,
- d) reduction of fixed operating costs, including hospital management,
- e) savings on outsourcing services,
- f) optimization of employment of medical and administrative personnel (reduction of employment by 83 posts),
- g) strengthening the market position of the healthcare entity and in proceedings regarding contracts for healthcare services with the National Health Fund,
- h) increasing the efficiency of resources, saving indirect costs and purchasing costs.

Short-term liabilities in 2014 in the Hospital complex amounted to PLN 25.78 million and in the Children's Hospital PLN 18.66 million. As of 31/05/2015, the Children's Hospital had payables of PLN 4.85 million, mostly short-term liabilities for deliveries of goods and services. In the years 2011-2015, the Hospital complex did not have any matured payables, all liabilities were settled on the dates of their payment, which proves the good liquidity of the entity. Financial results of hospitals in the period before and after the merger were shaped as in table 1.

Table 1. Financial results of the merged hospitals in PLN million

Year/ Hospital	Children's hospital	ROA %	Hospital complex	ROA %
2013	- 1 273	- 3,87	- 12 025	- 4,76
2014	0,4	1,38	- 7 242	- 2,69
2015	- 17 220			- 5,64
2016	- 9 403			-3,42
2017	- 26 695			No data

Source: financial data of the hospitals

As the review of financial results of merged hospitals shows, both plants previously obtained negative financial results. The effects of restructuring activities had a periodic positive impact on their profitability (restructuring of employment in the Children's Hospital brought about PLN 3 million savings in remuneration costs). The loss in 2017 was mainly caused by the increase in depreciation of fixed assets and purchased equipment. The balance sum of the Hospital Complex in subsequent periods was:

- a) in 2014 - PLN 269 million,
- b) in 2015 - PLN 305.5 million,
- c) in 2016 - PLN 275 million.

Significant expenditures on development, acquisition of modern equipment and apparatus improved the conditions of providing health services, but also required rational and full use of it. This could be implemented by acquiring new contracts for

health services with the National Health Fund or provision of charged health services. The Complex Hospital is located in a network of hospitals, which means stabilization of the sources of financing the activity.

The property was taken over on the basis of the financial report and accounting documentation of the Children's Hospital. In Resolution no. XII / 182/15 it was indicated that the merger took place through the acquisition. However, this was not fully "merger by acquisition", because there were no such conditions as (Accounting Act, articles 44a, 44b):

- a) determining the fair value of the assets and liabilities and capital acquired,
- b) determining the acquisition price,
- c) determining goodwill or negative goodwill.

As it was emphasized earlier, the legal regulations do not provide for the valuation of assets and liabilities and capital of merged hospitals at fair value. The property of the Acquired Children's Hospital in 2015 concerned:

- a) fixed assets PLN 22 million,
- b) current assets PLN 7 million,
- c) long-term and short-term liabilities PLN 21 million.

These amounts have not been measured at fair value. I assess this as a significant information gap in the process of mergers of hospitals in Poland. Information on fair value in merger processes indicates the potential (or lack of it) of bringing future economic benefits (in this case, the implementation of healthcare services). Property requiring renovation does not show significant potential, it is even the subject of necessary expenditures. Sometimes it is unnecessary and should be sold. Information on the fair value of the acquired assets and liabilities of the hospital is an important source of information for planning and managing merged entities in the future.

Conclusion

Managing the risk of the activity of the SPZOZ (the hospital) as a public sector entity is a new challenge faced by plant managers. The identification of operational risk and its minimization has been included in the management of hospitals from the beginning of their operation. At present, however, it should be planned, systematized and formalized in a written form, in accordance with new legal regulations in this area. The hospital manager, who is responsible for the plant's operational efficiency together with other entities in the health care sector, focus his activities on reducing the risk of the plant's operations. Uncertainty and risk may come from the environment i.e. the health care system, and from the internal activities of the unit, but it may also affect them. Coordination of corrective actions, among others in the form of merger of plants, aiming at improving their functioning, may be a response to the risk of action. The analysis of legal acts and the literature on the subject allows us to positively verify the research hypothesis set at the beginning of the article.

Observation of the financial condition of the entities after the merger indicates the diverse condition of the plants. Some of them have used the chance to improve their fitness and mitigate the risk of activity, while others require further restructuring. The

use of valuation of assets, liabilities and capital at the fair value of merged hospitals would increase the information and decision-related values of the reporting data of hospitals after the merger. It would also increase the reliability of forecasts to improve the financial condition of merged entities.

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SUPPLY CHAINS – ASPECTS OF CONTROL AND PARTNER RELATIONS

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Abstract: With the development of supply chains, the need to control of partners' joint activities increases. Such control is aimed at analyzing the dynamics of results achieved by these entities, as well as results achieved by entire chain. However, the use of control mechanisms may in some way affect the autonomy of the partners and it may negatively affect their mutual relations. Therefore, the purpose of the work was to determine which areas of control in relation to the activities of the partners are most often used and how it affects their relationships. The surveys addressed to the enterprises of the production sphere were used for the purpose of the work. On the basis of collected data, a statistical verification was made of the relationship between the use of control mechanisms in the supply chain and the occurrence of the partnership type relationship between the surveyed entities. What's more, the strength of this relationship was determined using the C-Pearson coefficient.

Key words: control, partner relations improvement, supply chains

Introduction

In the supply chain there are many problems related to the existence of various types of entities and various links between them. The entities cooperating in the supply chains often forget that their particular goals should not be more important than the goal of the whole supply chain, which is to provide the finished product to the final recipient. That is why there is an issue related to the coordination of activities in the chain. This requires the use of certain control mechanisms, usually taken by the leader. It is the entity that has the greatest impact on the other participants in the supply chain, what is more - it is characterized by the highest bargaining power. For this reason, the leader may impose certain actions to other entities in the supply chain. However, there are some areas of business activity that are their autonomous sphere. The leader should not violate these areas, unless they negatively affect the functioning of the supply chain. Nevertheless, the mutual relations of partners in the supply chains are somehow the result of control activities undertaken by the leader.

The authors of the article found this problem interesting. The aim of the study was to examine which areas of activity of the partners in the supply chains are controlled. What's more, it was decided to investigate the effect of their control activities on the mutual relations of the partners.

The work was divided into several parts: introduction, review of the literature concerning the problem under examination, a description of the research methodology, the main results of the research and final conclusions.

Control in supply chains

The development of partner relations is conducive to optimizing the functioning of the supply network, but it is also associated with a greater dependence of partners on each other. The stronger this relationship is, the more it is required from the partners to develop a higher level of mutual adaptation. This means reorganizing their own processes so that the partners can also benefit. As Hunter L., Beaumont P. and Sinclair D. note, for this purpose partners should develop a common set of control mechanisms. These authors also state that cooperating organizations may remain independent in the dimension of management, but in relation to mutual relations they agree and introduce similar mechanisms and procedures of supervision, which in effect allows them to function as if they created one integrated structure (Hunter, Beaumont, Sinclair 1996, pp. 235-257).

Control is a continuous or periodic process, which consists in comparing the actions and their results with plans. The assumption is that the control serves to better match the company's operations to the conditions of the changing environment, and on the other hand to increase the productivity of the actions undertaken. The general striving of enterprises to optimize processes requires the implementation of control mechanisms throughout the entire value chain, including business partners and clients (Kerremans 2008, pp. 7-15; Jurczuk, Gabryelczyk 2015, pp. 245-254). Studies in the area of control usually focus on coordination within companies (Łęgowik-Świącik 2012, pp. 48-55). However, an important feature of control is that it also includes the effect on the efficiency of cooperation between companies in supply chains (van Veen-Dirks, Verdaasdonk 2009, pp. 466-478; Szoltysek, Frączkiewicz-Wronka, Kotas 2012, pp. 31-255). Process of control is critical to supply chains success and it can be achieved through supply chain performance measurement (Gunasekaran, Patel, McGaughey Gunasekaran 2004, pp. 333-347; Rashid, Haris 2012, pp. 309-324).

The majority of partner companies control cooperation. This process involves carrying out, for example, audits or visits to partner enterprises. Most often, control is undertaken to check the compliance of the activities carried out with the standards established in specific partnership agreements (Kruczek, Żebrucki 2011, pp. 363-374; Chład 2012, p. 8). Partner companies have a fairly wide range of control mechanisms to use. The basic criterion for the division of these mechanisms is related to the subject of control. In this area, it can be distinguished: control of partners' activities, control of cooperation results or operation of the entire supply chain (Kot, Ślusarczyk 2012, pp. 17-24) and control of the personnel / organizational culture of partner companies (Groot, Merchant 2000, pp. 579-607).

The importance of control processes in supply chains increases with the expansion of the partnership. There are many problems in the relations between partners (Kempa 2016, pp.40-50; Daroń 2017, pp. 53-61; Witkowski 2010, p. 53). The more partners there are, the more necessary is monitoring of the agreement and its individual participants. It aims to detect potential or existing errors in the functioning of these entities in the scope of a given relationship. The processes aiming at checking the correctness of the partnership system operation should in particular concern (Chwistecka-Dudek, Sroka 2000, p. 132):

- fulfilling partners from the terms of the contract,
- implementation of benefits planned at the stage of establishing cooperation,
- degree of satisfaction of employees of partner companies from existing cooperation.

In the same time significant differences are noticed in the case of control processes carried out by the partners at the strategic and operational level. Financial instruments include: financial statements, enabling liquidity monitoring, general financial condition and profitability, balance sheet presenting the financial situation at a given time, income statement which shows financial effectiveness in the audited period and cash flow statements, showing the use of financial resources (Stoner, Freeman, Gilbert Jr. 2011, pp. 545-548). However, the vast majority of control in partner systems in the supply chains concerns the organizational and executive sphere.

What is more, the importance and frequency of control processes in the area described increase in proportion to the development of the quantitative partnership (ie the increase in the number of partners). Together with the development of partnership relations and raising their quality, the audit covers broader areas of activity, but due to the strategy developed jointly by partners and mutual trust, there may be a reduction in the frequency of controls.

Assumptions, description of the research tool and stages of the study

The research part of the work was carried out on the basis of primary data obtained during the conducted survey. The subject of the research was enterprises of the clothing industry (clothing manufacturers), whose headquarters are located in the Silesian Voivodship. For this purpose, a questionnaire was used as a research tool. The choice of this tool was conditioned by the type of information (their type) that was needed to examine the relationships taking place in the supply chains. Enterprises were selected for random testing. The questionnaire used in the study contained 30 main questions, which were closed and semi-open. There were seventeen closed questions. The advantage of closed questions is uniformity and ease of development, but there is a risk of not answering some answers. To avoid this, it can be left room for an additional answer, which was done in many questions. In ten of the thirty questions contained in the questionnaire, it was possible to mark more than one answer. In the questionnaire there were questions about the nominal and ordinal scale of the measurement. In some of the questions, the Likert scale was also used, because the data collected in this way are clear and show the strength of the occurrence of the phenomenon. In one of the questions, the Likert scale was applied to all 17 points in order to determine the strength of each of these effects. As a result, the questionnaire containing 30 questions (not including questions included in the score sheet) examines 46 issues in the form of closed and semi-open answers, and the collected data are qualitative.

The survey conducted consisted of few stages:

1. Preparation of the list of clothing industry enterprises in the Silesian Voivodship - the list was created in accordance with the alphabetical order based on the list of entrepreneurs according to PKD¹, available on the web site www.baza-gus.pl,
2. Selection of the test sample and randomness test of the sample - out of 3322 enterprises of the clothing industry, having their headquarters in the Silesia province, 180 companies were selected for the study. The companies were randomly selected for the sample based on the previously generated pseudo-random numbers in the spreadsheet. Using the randomness test of the sample, the representativeness of the test sample was confirmed. The following statistical hypotheses were adopted:

H_0 - a sample of production enterprises, which have their headquarters in the Silesian Voivodeship, is random,

against the alternative hypothesis:

H_1 : a sample of production enterprises with headquarters in the Silesian Voivodeship is not random.

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

3. Data collection using a prepared questionnaire - this stage consisted of several phases. In the first phase, letters were sent containing a request to complete the survey by email - to entities that had e-mail addresses given to the general news. The questionnaire was sent by traditional mail to the rest of the surveyed entities selected for the survey. Then, postal questionnaires were sent to entities that did not respond to the request to participate in the study electronically. The next phase - the longest lasting one - included collecting data in selected entities during direct visits in person or using the help of friends and by phone. In order to examine companies whose headquarters were significantly dismissed, a telephone call was first attempted.
4. Verification of the correctness of the collected questionnaires - 111 surveys were obtained during the study, of which 103 were accepted for analysis (a few were rejected due to incompleteness).
5. Statistical analysis based on the received data, graphic and descriptive presentation of the test results.

The existence of a statistical relationship between the use of control mechanisms in the supply chain and the occurrence of the partnership type relationship between the surveyed entities was made using the Chi-square test. The strength of this relationship was determined by the C-Pearson coefficient.

¹ PKD – Polska Klasyfikacja Działalności - Polish Classification of Activities, Legal basis: Regulation of the Council of Ministers of December 24, 2007 regarding the Polish Classification of Activities (PKD)

Control and partner relations in the light of research

Among the enterprises that use control in relationship management (*Figure 1*), the largest percentage controls the effects of cooperation with partners. On the other hand, the smallest share of indications was recorded for the area "control of the position and importance of the partner". This is understandable in the case of enterprises that already have some developed relationship with major partners and know their market position.

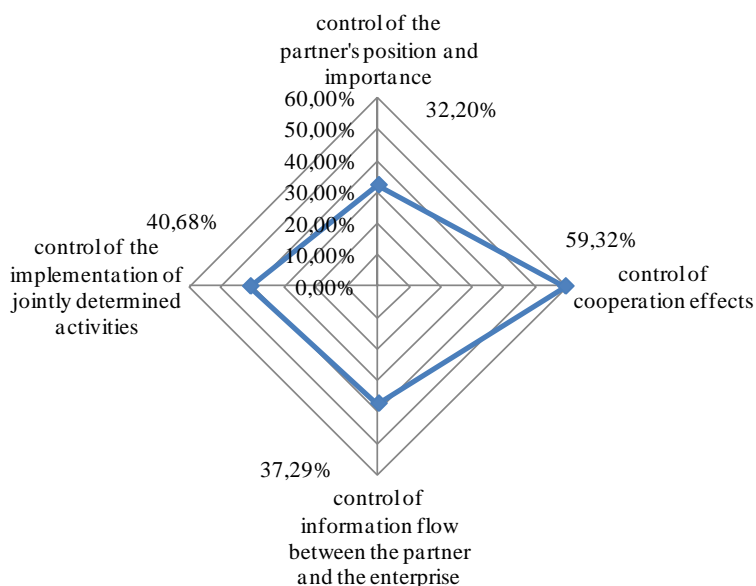


Figure 1. Areas of control in the supply chains of the surveyed enterprises

Source: own study

In the question about the area of control in relation management, it was possible to mark many answers. This resulted in 12 categories of answers. The most often indicated was one control area (over 15% of enterprises) and it concerned 3 different areas: control of information flow between the partner and the enterprise, control of cooperation effects and control of the implementation of jointly determined activities.

The next stage of the analysis was to check whether there is a relationship between the use of control elements in the supply chain and the type of relations occurring between the partners. The relationship type was determined earlier based on the answers to the questions contained in the questionnaire, including length of relationship, their nature, information exchange, capital involvement, etc.

To verify the existence of the above dependence, the division into partner and traditional relationships was used. The independence test χ^2 was applied. It has been assumed that the "relationship type" feature is a dependent variable, while "controlling" is an independent variable.

For the purpose of the test, the following null hypothesis was formulated: H_0 : "relationship type" and "control" are independent, placed on the alternative hypothesis:

H_1 : "relationship type" and "control" depend on.

As it can be seen when analyzing results (*Table 1*), at the level of significance $\alpha=0,05$ and for $k = 1$ degrees of freedom, the statistic value is 11,075. That means exceeding the critical value of the statistics, which is equal in this case 3,8415.

Table 1. The results of χ^2 test for variables: "relationship type" and "control"

Tested characteristics (variables)	The empirical value of statistics	Number of degrees of freedom	The significance level	Critical value of statistics	Test probability (p level) for the test	C-Pearson factor
type of relation	11,075	1	0,05	3,8415	0,00088	0,32
control						

Source: own study

Considering that $\chi^2 = 11,075 > 3,8415 = \chi^2_{\alpha}$, we reject the null hypothesis, assuming the independence of the "relationship type" and "controlling" traits. This means that in the light of statistics, the ongoing relationship is important. What is more, the strength of the demonstrated relationship between the type of relationship and the occurrence of control, measured by the contingency rate, is 0,32. On this basis, it can be classified into the medium-intensity range. Finally, this allows us to state that the existence of control elements between participants in supply chains affects, to a medium extent, the type of relations between partners.

Summary

This paper attempts to cover the subject of applying control elements in supply chain management in the context of the impact of these activities on the mutual relations of partners. The problem of controlling as an element of supply chain management is often taken up in the scientific literature. Methods and tools are being developed to measure the efficiency of supply chains or to choose partners and evaluate their activities. As well control areas in supply chains are mentioned and etc. (Dooley 2005; Trzuskawska-Grzesińska 2017; Jatta 2009 et al.). However, the subject of the influence of control mechanisms used by partners in supply chains on shaping the relations between them has not been scientifically confirmed so far. This study shows that there is a statistically significant relationship between the type of relations between partners in the supply chains and the use of controlling elements in this area. Therefore, it should be recognized that the goal set in the article has been achieved. What's more, the dependence of this relationship was determined as moderate, using the C-Pearson contingency ratio for this purpose.

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