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Contents

IS M-LEARNING A NEW WAY TO ATTRACT STUDENTS TO LEARN?

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Abstract

M-learning is perceived as a new way of learning, which assume to use personal electronic devices, such as mobile phones, smart phones, tablets or palmtops. The only requirement is a unlimited access to the Internet. This could also be a new way to attract students – by offering them a new solution for studying. To check whether this concept would be accepted by students, the research has been conducted among the students, who are the e-learning platform's users. Based on the conducted research, Czestochowa University of Technology, may decide if this solution should be adopted as a new way of learning. The obtained results present that students are the users of electronic devices, such as smart phones, tablets or e-book readers, but still they are not fully convinced to m-learning.

Introduction

In polish reality the m-learning concept seems to be the new one. But in the literature, this issue was the subject of discussions at the beginning of the twenty-first century. The impetus for the creation of m-learning was the technological development leading to the invention of smart phones, tablets, notebooks and all kinds of mobile devices, that provide an access to the Internet, and are being owned by the masses of users. And caused the

development of mobile social-networking applications (MSNAs) which enable communication between users (Wang, Chou, 2016). So it can be assumed that the use of these devices' capabilities for educational purposes was a matter of time. M-learning very often is defined as a form of e-learning, whose high popularity has arisen from the evolution of technology, and changed the way of materials' supply for the students (Sobolewska, 2015). Mobile learning involves the use of mobile technology, which is constantly evolving, in order to enable learning anytime and anywhere (Crescente, Lee, 2011). With mobile learning people can use mobile devices to access educational resources, connect with other users or even create content for learning. Mobile learning is also perceived as a branch of ICT in education (United Nations, 2013). It implies adapting and building upon the latest solutions in ICT technology, redefining the responsibilities of teachers and students, and blurring the lines between formal and informal learning (McQuiggan, Kosturko, McQuiggan, Sabourin, 2015).

M-learning is characterized by many features typical for e-learning, but unlike it, is being characterized by a greater flexibility of use, eg. e-learning causes the necessity of being in one place, while the m-learning removes this limitation (Hwang, Chang, 2011). Thus, m-learning is an extension and e-learning completion (Zhou, 2013). In addition, m-learning provides access to scientific contents, materials, dictionaries and tests or conducts personalized curriculum according to learning needs (Chen, Gillenson, Sherrell, 2002).

M-learning in education is manifested by the fact, that teachers can prepare and lectures via notebooks or laptops. In turn, students having an unlimited access to the Internet, can check some issues, search for information and acquire knowledge (West, 2013). As I. Jacobs (2013) noted: "always on, always connected mobile devices in the hands of students has the potential to dramatically improve educational outcomes". They can also stay in constant contact with the teacher.

Literature review

By definition, m-learning refers not only to the education sector as a solution for the knowledge's acquisition, because the m-learning is also used by business which, for example provide trainings for their employees (Shuler, Winters, West, 2013). One of the first m-learning definition states that is "any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies" (MOBIlearn, 2003). Quinn (2000) defined it as "the intersection of mobile computing and e-learning: accessible resources wherever you are, strong search capabilities, rich interaction, powerful support for effective learning, and performance-based assessment". According to definition given by Kukulska-Hume (2006) and Traxler (2007), m-learning is "all educational benefits, in which the mobile devices are the one or dominant used technology". Others, in turn, underline that mobile learning should not be limited to learn on devices, fitting to female purse or male pocket only (Keegan, 2016). M-learning, in particular, uses mobile devices, integrated with the respective applications to provide the content to the audience (Brown, 2005).

M-learning as an educational activity makes sense when used technology is fully mobile and when its users stay mobile while they learn. This emphasizes the mobility of learning and the significance of the "mobile learning" term (El-Hussein, Cronje, 2010).

It can therefore be assumed that if the m-learning is now quite popular form of learning, but this concept is still characterized by a growing trend, as its capabilities have not been fully utilized yet.

Method

Unless the world, m-learning is widely used both in business and education, in Poland is still called a "niche trend", rarely used in the education sector. Having in mind the above, the main purpose of conducted research was to check how polish students perceive the m-learning concept. To carry out the research, students of the Faculty of Management of Czestochowa University of Technology were selected. More than 500 research questionnaires have been distributed among the students during the summer semester in 2016. For the final study only 446 questionnaires have been classified, some of them have not been returned and some did not meet the formal requirements.

The minimum sample size for estimating the probability of p success in a general population, was calculated on the basis of the formula for sample size with a very large population:

$$N_{\min} = \frac{N_p(\alpha^2 \times f(1-f)}{N_p \times e^2 + \alpha^2 \times f(1-f)} = 381,$$

where:

$N_{\min}$ – the minimum sample size,
N_p – the size of the population,
α^2 – the confidence level for results,
e^2 – accepted level of highest error,
f – the size of the fraction.

This formula allows to obtain a predetermined accuracy of the estimation of population structure ratio. As is evident from the calculations, the minimum sample size, with the adopted confidence level 1–2 = 0.90, and the accepted level of highest error e = 5%, should be 381 questionnaires. Due to the fact that the study involved 446 questionnaires, it can be assumed that this condition has been met.

Results

As was mentioned earlier, the research questionnaire consists of three parts: the specifications, questions relating to the structure of income and expenditure and questions related to feelings of students with respect to its financial resources. The study involved 446 students, of which 264 were women (59%) and 182 – men (41%). The vast majority of surveyed students were people between 19–20 years old. Students between 21–22 years old were found on the second place, and between 23–24 years old on the third place. In the case of students older than 24 years, only 6% of them were respondents of this research. However it is worth to note that conducted research have not been directed to the specific age group of students. Almost every respondent owns a laptop and smart phone. More than half have tablets, but only, 9% of them have an e-book reader. Laptop is a very popular device, in these days, it is cheap and necessary device, not only for study but for social life as well. Only a few students have admitted that they did not have laptop for their own purpose, but they use parents' laptops for work and leisure. The same situation can be observed in the case of smart phones – it is very rare to meet student using a traditional phone. This is caused that smart phones are quite cheap and offered by main mobile operators for a quite small amount. Five years ago tablets were owned by a small number of people – due to their price. But now, more than half of respondents own tablet, treating this device as an additional tool used for Internet, file sharing and games.

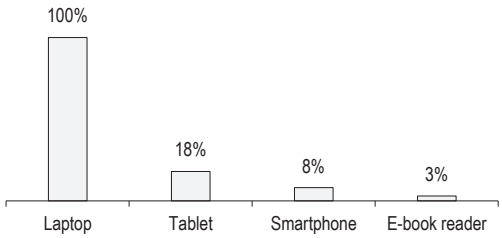

Figure 1. Devices used to learn

Source: own calculations' based on conducted research.

It is clearly visible from the above, that every respondent use a laptop to learn. And this is also a main device, because less than 20% use tablet, less than 10% use smart phone and less than 5% use e-book reader. Laptop is the most often used device, due to the fact that, as was mentioned earlier, almost every respondent owns this kind of device, and also it offers the most widest possibilities of use. Can be used in order to surf over the Internet, to meet and stay in touch with the others, it allows for music listening or documents writing. And, above all, the features, such as text, calculation or presentation editors, allow for the preparation for the classes. Tablets, due to their small screens are good for looking up for some information, smart phones are used to share the files and e-book readers are used to read the necessary materials, which are in the electronic form. But all the respondents have admitted that laptop is the first and main tool used to gain a new knowledge, do homeworks or prepare for exam.

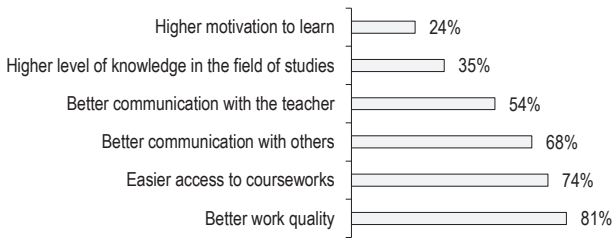

Figure 2. The advantages of m-learning

Source: own calculations' based on conducted research.

After the presentation the issue of m-learning, with its essence and main features description, with highlighting its presence in respondents studying mode, we have asked about the perceived pros and cons of m-learning. And as can be noticed on the figure above, to the main pros, the respondents included: better work quality, access to the courses and better communication with others. On the next places the following were found: better communication with the teacher, higher level of knowledge and higher motivation to learn. Under the better work quality, respondents understood faster knowledge acquisition, better preparation for classes and shorter time needed to learn. Because in opposite to traditional way of learning, in which students had to, in order to find new information, visit the library in person, now they simply run the Internet to find the necessary sources. And this leads to significant time savings.

Access to the courses – here the respondents highlight the possibility of unlimited and constant access to materials, tutorials and courses. Also the need to attend the lectures have disappeared, as everyone can download this from the website. M-learning, in respondents' opinion, improves the communication between students and teachers as well. Thanks to it, students and teacher are able to set up a "special place" in Internet sphere, where they can communicate in order to share the information or find the answers. Higher motivation to learn was explained by m-learning attractiveness – this is quite new way of learning so attracts students, the various form of it caused that students are curious and willing to learn. This is also confirms the topic of this article – which can be treated as a hypothesis as well.

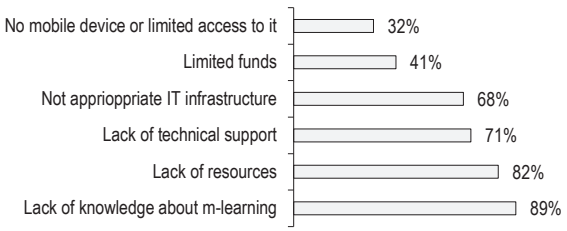

Figure 3. The disadvantages of m-learning

Source: own calculations' based on conducted research.

To the biggest disadvantages of m-learning the respondents included: lack of knowledge about this concept, lack of resources, lack of technical support, not appropriate IT infrastructure, funds limitations and lack of mobile devices. From the obtained results we can assume that m-learning is quite new conception of learning, unknown to almost every respondent. From the name of it, respondents concluded that mainly it relies on using mobile devices in order to get educational information or gain a new knowledge, and these tools are equipped with appropriate applications. And basically they do not know more than this. That is why respondents have highlighted the lack of resources, technical support and weak IT infrastructure. On the one hand, these defects do not constitute defects in the concept of m-learning, but rather represent a lack of preparation, eg. from the university to implement this concept into practice, just by lack of resources, support and poor infrastructure. 32% respondents have highlighted another disadvantages such as no appropriate mobile devices or difficulties in accessing them, but it is more connected with the lack of knowledge on m-learning. Because respondents think that they need a special devices or application, especially dedicated to m-learning. While in real, a simple laptop, tablet or smart phone can be used instead.

Almost half of respondents have indicated the supplementary role of m-learning in education process. M-learning can also has an influence on attracting students in the learning process. 10% of respondents have indicated that m-learning is a non-significant additional, with no influence on learning process. And only 4% think that m-learning in the future, can fully replace the traditional learning. This distribution of answers can be dictated by the fact that m-learning is still a new way of learning for polish students, that is why they treat it as a supplement. We can speculate that in the future, when m-learning will become a common use way to learn, and thus will not be perceived as a supplement any more.

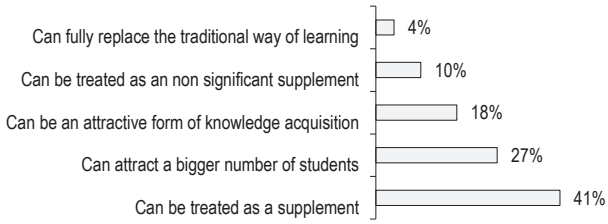

Figure 4. The role of m-learning in education

Source: own calculations' based on conducted research.

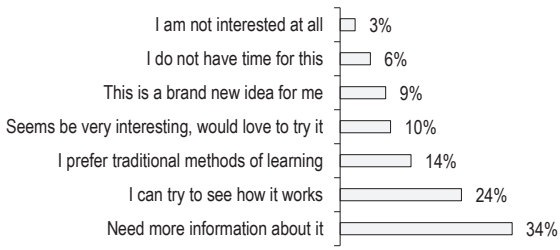

Figure 5. The overall insights on m-learning

Source: own calculations' based on conducted research.

And the last question was about the overall respondents' insights on m-learning. As we can see, almost 35% of them have indicated that they would need more information about m-learning. And then they would decide if it is worth to try or not. More than 20% are ready to try and see how m-learning works. 14% have highlighted that they preferred a traditional way of learning, but under "traditional" they understand using Internet, laptops and e-mails in order to gain or share information. So from this, we can conclude that "traditional" way of learning in the form of: reading paper books, visiting libraries or attending the lectures are no more traditional, but more old-fashioned. For 10% m-learning seems to be very interesting and they would love to try it in practice. 9% admitted that m-learning is really something new. The smallest part of respondents have highlighted that they did not have time for this and 3% have declared that they are not interested at all.

Conclusions

Today's reality is characterized by high dynamics of change and the widespread use of mobile devices, led not only to increase the information resources but also altered the way they transmit. Information must be short, contains the essence and adopts an attractive form. As a result, they are more quickly absorbed than information in the form of eg. long texts. At the moment, m-learning seems to be a new phenomenon, taken as a supplement or form attractive learning process. However, over a time it can become a commonly used mode of teaching.

Polish student are active users of electronic devices, such as laptops, smartphones, tablets or e-book readers, but still they are not convinced if m-learning would be a useful learning tools. At present they can highlight some pros and cons, and they indicate readiness to try m-learning in their studies but they perceive it as a supplement only. According to the listed m-learning advantages, students have highlighted easier access to learning materials and easier communication with teacher or other students. That is why it is worth to repeat this research in the near future (1–2 years) to check if or how m-learning evolve and how students' attitude to m-learning has changed. But at first, to popularize m-learning among students, limitations such as: lack of resources, lack knowledge and lack of technical support should be removed. That is why, is possible to add one expectation to the expectations according to the m-learning's future development, which have been listed in the theoretical part of this article – the pressure should be put on better dissemination of knowledge about m-learning among the users, in that case – students and teachers. Not to mention that all efforts should be made in order to provide more and better resources and appropriate technical support.

References

Brown, H.T. (2005). Towards a model for m-learning. *International Journal on E-Learning*, *3* (4), 299–315.

Chen, L-D., Gillenson, M.L., Sherrell, D.L. (2002). Enticing online consumers: an extended technology acceptance perspective. *Information and Management*, *8* (39), 705–719.

Crescente, M.L., Lee, D. (2011). Critical issues of M-Learning: design models, adoption processes, and future trends. *Journal of the Chinese Institute of Industrial Engineers*, *2* (28), 111–123.

El-Hussein, M.O.M., Cronje, J.C. (2010). Defining Mobile Learning in the Higher Education Landscape, *Educational Technology & Society*, *3* (13), 12–21.

Hwang, G-J., Chang, H-F. (2011). A formative assessment-based mobile learning approach to improving the learning attitudes and achievements of students. *Computers and Education*, *4* (56), 1023–1031.

Irwin, J. (2013). Modernizing Education and Preparing Tomorrow's Workforce through Mobile Technology. Paper presented at the i4th Summit, March.

Keegan, D. (2016). *The future of learning: From eLearning to mLearning*. Retrieved from: http://learning.ericsson.net/mlearning2/project_one/resources/articles.html (4.06. 2017).

Kukulska-Hulme, A., Pettit, J. (2006). *Practitioners as innovators: emergent practice in personal mobile teaching, learning, work and leisure*. Retrieved from: https://www.researchgate.net/publication/42798354_Practitioners_as_Innovators_Emergent_Practice_in_Personal_Mobile_Teaching_Learning_Work_and_Leisure (4.06.2017).

McQuiggan, S., Kosturko, L., McQuiggan, J., Sabourin J. (2015). *Mobile Learning. A Handbook for Developers, Educators, and Learners, SAS Institute*. Retrieved from: https://www.sas.com/storefront/aux/en/spmled/67156_excerpt.pdf (2.11.2017).

MOBIlearn (2003). *Guidelines for learning/teaching/tutoring in a mobile environment*. Retrieved from: https://www.researchgate.net/publication/246347988_MOBIlearn_D41_guidelines_for_learningteachingtutoring_in_a_mobile_environment (2.11. 2017).

United Nations (2013). *Policy guidelines for mobile learning*. Retrieved from: http://unesdoc.unesco.org/images/0021/002196/219641E.pdf (2.11. 2017).

Quinn, C. (2000). *mLearning. Mobile, Wireless, In-Your-Pocket Learning*. Retrieved from: http://www.linezine.com/2.1/features/cqmmwiyp.htm (2.11.2017).

Sobolewska, O. (2015). E-learning społecznościowy – kierunki rozwoju nauczania zdalnego. In: W. Chmielarz, J. Kisielnicki & T. Parys (eds.), *Informatyka w społeczeństwie informacyjnym*. Warszawa: Uniwersytet Warszawski.

Shuler, C., Winters, N., West, M. (2013). *The future of mobile learning. Implications for policy makers and planners.* Retrieved from: http://unesdoc.unesco.org/images/0021/002196/219637E.pdf (23.05.2017).

Traxler, J. (2007). Defining, Discussing and Evaluating Mobile Learning: The Moving Finger Writes and Having Writ... *The International Review in Open and Distance Learning*, *8*, 1–13.

Wang, E.S-T., Chou, N.P-Y. (2016). Examining social influence factors affecting consumer continuous usage intention for mobile social networking applications. *International Journal of Mobile Communications*, *1* (14), 43–55.

West, D.M. (2013). Mobile Learning: Transforming Education, Engaging Students, and Improving Outcomes, Center for Technology Innovation at Brookings.

Zhou, T. (2013). Understanding continuance usage of mobile services. *International Journal of Mobile Communications*, *1* (11), 56–70.

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UNIVERSITIES' SOCIAL RESPONSIBILITY VS. GRADUATES' HUMAN CAPITAL*

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Keywords universities' social responsibility, graduates' human capital, higher education

Abstract

The subject matter of the present paper pertains to human capital of university graduates in the context of universities' social responsibility. The paper makes a premise that the responsibility revolves around proper preparation of graduates for undertaking prospective professional and social roles.

The objective of the paper is to present selected aspects of human capital of university graduates emerging from actions undertaken by a socially responsible university. The paper makes a reference to survey studies aimed at evaluating knowledge, skills, social attitudes, and employment conditions of graduates of selected universities in Lublin.

Results of analyses indicate that modern universities ought to embrace a greater responsibility for parties participating in higher education process, including care for their qualifications, professional competences, and those encompassing substantive scope and personality. By doing so, they will contribute to challenges in the context of social responsibility being coped with, which, in turn, will foster the development of human capital.

* The paper was compiled in the framework of DS. 205 statutory research financed by the Ministry of Science and Higher Education.

Introduction

Global processes occurring in and around universities influence the way they have been operating so far. Apart from teaching and research, cooperation with the public and businesses has become an additional task of a modern university (Shattock, 2005; Sam, Van Der Sijde, 2014; Rider, 2013).

Growing significance of universities in shaping knowledge of the society resulted in the emergence of issues regarding the scope of universities' social responsibility (López, Benítez, Sánchez, 2015). The social responsibility may be associated with universities' responsibility for general well-being (regarding the society, economy, etc.), one connected with adopting an attitude of respect towards the world, or responsibility for realizing particular tasks and their consequences (Kowalska, 2009).

The present paper diagnoses issues associated with the responsibility towards stakeholders (students and graduates) for the realization of particular tasks by universities. Human capital was evaluated with regards to knowledge, skills and social attitudes of students graduating from universities. The paper makes a premise that the quality of graduates' human capital stems from knowledge, skills and attitudes emerging in the process of education. Results of studies conducted among students of selected universities in Lublin region served as the basis for evaluating universities' efficiency in the process.

Universities' social responsibility – theoretical approach

The idea of corporate social responsibility (CSR) denotes voluntary incorporation of social and environmental issues into the commercial operation of businesses and their relationships with stakeholders (Sulejewicz, 2008; Piasecka, 2015). CSR is about transparency and ethical business operations which contribute to sustainable development, and take into account shareholders' expectations (Cybal-Michalska, 2014).

Universities have become a part of discourse as far as CSR is concerned (Maliszewski, Kacprzak, 2009; Piasecka, 2015). As public utility institutions, apart from teaching and research, universities are obliged to include social and ecological needs in their operation. As a consequence, they create added value for societies and economy (Mainardes, Alves, Raposo, 2010; Białoń, Werner, 2012).

Universities' responsibility may be expressed in creating value for societies in the form of educated graduates, impacting public opinion by expressing opinions of experts in sciences, by caring for their image and maintaining good relations with businesses and social environment (Cybal-Michalska, 2014). Responsible teaching is realized by the transfer of knowledge which discusses several fields, e.g. ethical operation, responsibility for the regions and its sustainable growth, and natural environment (Maliszewski, Kacprzak, 2009). Universities' responsibility is also associated with preparing graduates to perform particular social roles (Cybal-Michalska, 2014). Responsibility for education is manifested in inspiring students to gain knowledge and skills, but also to shape their attitudes, characters, personalities enabling them to become employed and create jobs as entrepreneurs (Białoń, Werner, 2012).

Operations of socially responsible universities encompass, e.g. the following (de Tchorzewski, 2006):

- aspirations for achieving the highest standards of teaching and research,
- teachers and students' ethical responsibility for respecting obligations of roles performed in the academic community,
- developing a friendly community facilitating learning and education,
- partner relations when cooperating with business and social environment.

The issue of university graduates' human capital

Human capital, understood as knowledge, skills, health, and vital energy (Rutkowska, 2012) determines peoples' capacity for work, adaptation to changes in their surrounding environment, and ability to create new solutions.

Human capital has become of particular significance since the Lisbon Strategy has been signed. The strategy assumes that the development of knowledge-based society and economy requires particular qualifications and competences which emerge primarily at universities (Biała księga, 2003; Władyniak, 2003).

When viewed from the graduate's perspective, their professional potential, measured by the capacity for achieving income and job satisfaction by means of applying knowledge and skills, constitutes the value of the potential. Such capital emerges from previous investments in education, gaining new experiences and qualifications.

Method

Based on the definition of human capital and its structure, universities' social responsibility was examined in two areas. The first pertained to the extent to which universities meet students' requirements regarding vocational training. The analysis encompassed 327 students graduating from Maria Curie Skłodowska University's (abbr. UMCS), and the University of Physical Education in Warsaw Biała Podlaska branch's (abbr. AWF) full-time second cycle programs.

The second aspect of universities' social responsibility discussed in the paper examines students' human capital with regards to health. Declarations of 357 students of health sciences of Medical University of Lublin (abbr. UM) and the University of Physical Education in Warsaw Biała Podlaska branch regarding their lifestyles were assessed.

The paper makes a premise that universities are responsible for the quality of students' human capital. A comparative analysis of students' opinions was conducted by non-parametric Pearson's chi-squared test and Cramér's V (Vc). Differences of $p < 0.05$ were considered statistically significant.

Empirical data constitutes a section of a broader study conducted by authors in the framework of DS. 205 statutory research.

Key competences as an element of students' human capital

In light of CSR, teaching which meets graduates' expectations constitutes a manifestation of universities' responsibility (Piasecka, 2015). Results of empirical studies conducted among students of selected universities in Lublin region illustrate such operations of universities.

Analyses determined the discrepancy between the desired and acquired key competences of students of examined universities.

Results of analyses indicate a series of discrepancies between students' expectations and acquired competences (Figure 1). Such competence gaps pertain primarily to the practical application of knowledge, creativity, and personal competences of respondents. Importantly, such competences translate into the value of human capital and enable a particular position on labor market to be achieved, or the standard of living improved.

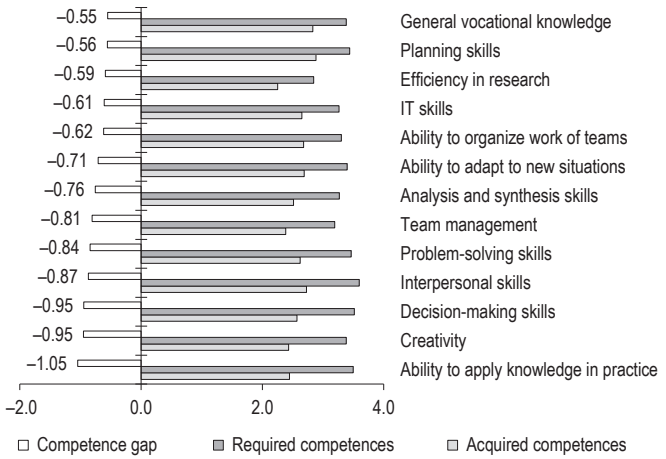


Figure 1. Required and acquired competences as evaluated by students (N = 327): scale 1–4; 4 – max

Source: own study.

Activities boosting graduates' human capital

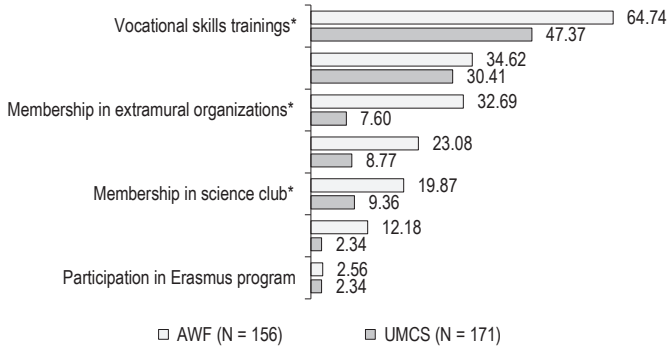
Human capital results from both an individual's participation in education, and actions encompassing qualifications' improvement. Actions of individuals undertaken with the purpose of acquiring additional professional experience seem significant in the process of developing students' capital. Such actions, undertaken in the course of studies, facilitate employability. In addition, if continued beyond university studies, they constitute success factors (Cybal-Michalska, 2014).

The paper attempts to evaluate the frequency students undertook actions fostering the development of human capital. In an attempt at establishing the extent universities impact such behavior, a comparative analysis regarding opinions of students of both evaluated universities was conducted.

Respondents' declarations regarding actions improving the value of human capital indicated that majority of these pertain to participation in various courses and trainings on hard competences (56% of respondents, Figure 2). AWF students manifested statistically significant activity (65% vs. 47% – UMCS students; Vc = 0.17) more frequently. Approx. every third student declared participation in trainings on soft skills. In addition, AWF students declared membership in extramural organizations (33% vs. 8%; Vc = 0.32), Academic Sports Association (23% vs. 9%; Vc = 0.20), and science clubs (20% vs. 9%; Vc = 0.15) more frequently.

Additional professional experience was gained primarily in summer work in Poland (approx. 45% of all respondents) or abroad (19%, Figure 3). AWF students declared working abroad more frequently (24% vs. 14% – UMCS; Vc = 0.12). Moreover, on average, every fifth student worked as a volunteer. Such form of involvement was observed among AWF students more frequently (26% vs. 15% – UMCS; Vc = 0.14).

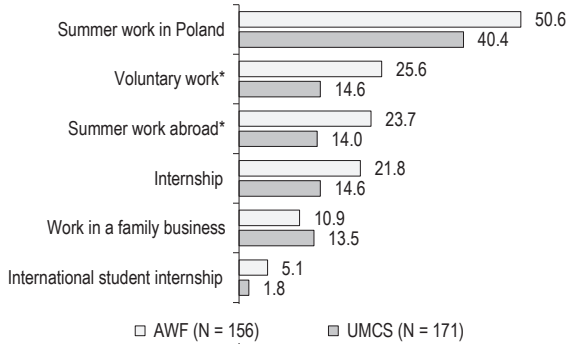
International student internships gained relatively low interest among students of both universities.



* Statistically significant differences; p < 0.05.

Figure 2. Activities boosting respondents' vocational capital (%)

Source: own study.



* Statistically significant differences; p < 0.05.

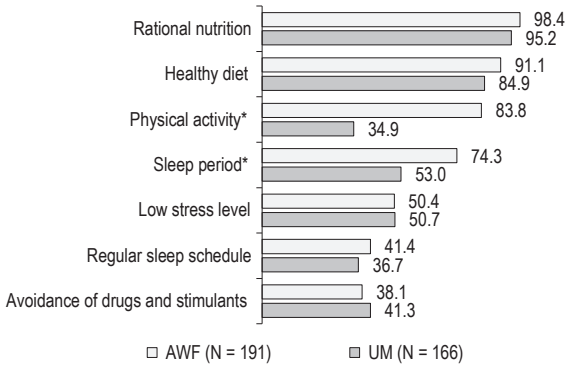
Figure 3. Experiences boosting respondents' vocational capital (%)

Source: own study.

Universities' social responsibility vs. students' pro-health attitude

Shaping students' attitudes constitutes a further aspect discussed in light of universities' social responsibility. Making a premise that health constitutes an element of human capital, declarations of UM and AWF students regarding health were examined.

General declarations of respondents regarding a healthy lifestyle were assessed in order to evaluate the quality of human capital. 58% of all respondents declared they lived a healthy lifestyle. AWF students declared it more frequently (72,8% vs. 41.6% – UM; Vc = 0.32).



* Statistically significant differences; $p < 0.05$.

Figure 4. Pro-health attitudes vs. the university (%)

Source: own study.

A premise was made that the identification of students' lifestyles and their diversity in examined universities may indicate how successful these institutions are regarding responsibility for education in terms of attitudes towards health.

The analysis attempted to identify students' pro-health attitudes and was conducted based on factors commonly considered as determining a healthy lifestyle (Anand, 2005; Słopiecka, 2012; Lipka, Janiszewski, Musiałek, Dłużniewski, 2015). The analysis revealed that diet and nutrition constitute a significant health factor among students of both examined universities. Respondents are diversified only regarding two aspects. Due to the specific focus of the university, AWF students undertook various forms of physical activity (approx. 84% vs. 35% – UM; Vc = 0.50) and slept a recommended number of hours (74% vs. 53% – UM; Vc = 0.20) more frequently than UM students.

Conclusions

The paper examines universities' social responsibility for developing human capital and preparing graduates for performing particular professional and social functions (Kowalska, 2009). Universities' social responsibility was evaluated from the perspective the of graduates of second cycle programs at selected Lublin universities.

The evaluation of universities' effectiveness regarding social responsibility for knowledge and skills of graduates revealed discrepancies between students' expectations and acquired competences. These competence gaps pertained primarily to the practical application of knowledge, creativity, and respondents' personal competences. Such competences decide upon the value of graduates' professional human capital and enable them to achieve a specific position on labor market. Therefore, particular remedial actions in universities' policies ought to be undertaken.

Knowledge and skills of applying it in practice constitute a fundamental element of human capital. However, due to the inflation of university diplomas, graduates' competitiveness is determined by other factors as well (Barwińska-Małajowicz, 2015). Activities undertaken in order to acquire required competences and professional

experience constitute a significant factor in developing university graduates' human capital (Cybal-Michalska, 2014). Results of present studies indicate that students are aware of consequences of such actions. In addition, it was determined that it was AWF students who declared participation in activities facilitating the growth of human capital more frequently.

University graduates' human capital, measured by the capacity for achieving income and job satisfaction, is manifested not only by knowledge and skills, but also by their attitudes. Opinions of students representing health sciences were examined in light of universities' social responsibility. A premise was made that it is health which enables remaining elements of human capital (e.g. competences) to be fully utilized. Therefore, the study analyzed students' opinions regarding their lifestyles. Results revealed that only 58% of respondents declared living a healthy lifestyle. The results indicate a high level of human capital seen from the perspective of a lifestyle. On the other hand, universities offering education in such fields are responsible for knowledge, skills and social competences of future workforce in the field, who are to be ready to undertake professional activities (Varela-Mato, Cancela, Ayan, Martín, Molina, 2012). Studies revealed that attitudes towards health are determined by the specific character of the academic community a student functions in, among others.

Based on the presented results of empirical studies, universities ought to improve responsibility for the following:

- development of key competences to meet students' expectations,
- motivation of students and development of conditions enabling them to acquire additional experiences improving their human capital,
- shaping socially responsible attitudes (including those promoting healthy lifestyles).

When discussing universities' responsibility for graduates' human capital, the fact that students are co-responsible ought to be highlighted. According to the student-centric concept, the student bears chief responsibility. The role of the teacher is to direct and supervise learning. Therefore, modern higher education requires comprehensive involvement and cooperation of all stakeholders maintaining responsibility, obligation and goodwill (Mainardes, Alves, Raposo, 2010; de Tchorzewski, 2006).

References

Anand, P. (2005). Capabilities and health. *Journal of Medical Ethics*, *31*, 299–303.

Barwińska-Małajowicz, A. (2015). Tranzycyjny kapitał kariery absolwentów szkół wyższych w Polsce – wybrane aspekty teoretyczne i empiryczne. *Nierówności Społeczne a Wzrost Gospodarczy*, *2* (42), 378–398.

Biała księga 2003. (2003). Część II – Polska wobec Strategii Lizbońskiej. Polskie Forum Strategii Lizbońskiej. Gdańsk–Warszawa.

Białoń, L., Werner, E. (2012). Społeczna odpowiedzialność szkoły wyższej w kontekście jej wizerunku. *Nauka i Szkolnictwo Wyższe*, *1* (39), 142–161.

Cybal-Michalska, A. (2014). Proaktywność w karierze jako narzędzie inwestycji i odnawialności kapitału kariery młodzieży akademickiej. *Rocznik Pedagogiczny*, *37*, 93–107.

de Tchorzewski, A.M. (2006). Spór czy dialog wokół edukacji akademickiej. *Studia Humanistyczne*, *6*, 61–69.

Kowalska, K. (2009). Społeczna odpowiedzialność uczelni. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, *1*, *2* (13), 289–300.

Lipka, A., Janiszewski, M., Musiałek, M., Dłużniewski, M. (2015). Studenci medycyny a zdrowy styl życia. *Pedagogika Społeczna*, *2* (56), 189–203.

López, S.G., Benítez, J.L.S., Sánchez, J.M.A. (2015). Social Knowledge Management from the Social Responsibility of the University for the Promotion of Sustainable Development. *Procedia-Social and Behavioral Sciences*, *191*, 2112–2116.

Mainardes, E.W., Alves, H., Raposo, M. (2010). An exploratory research on the stakeholders of a university. *Journal of Management and Strategy*, *1* (1), 76–88.

Maliszewski, T., Kacprzak, A. (2009). Etyczni – ekonomiczni – efektywni. Odpowiedzialne kształcenie menedżerów przez szkoły wyższe. *Nauka i Szkolnictwo Wyższe*, *2* (34), 44–59.

Nussbaum, M. (2000). Women's Capabilities and Social Justice. *Journal of Human Development*, *1* (2), 219–247.

Piasecka, A. (2015). Społeczna odpowiedzialność uczelni w kontekście wewnętrznego zapewnienia jakości. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *378*, 309–319.

Rider, S. (2013). Higher heteronomy: Thinking through modern university education. In: *Transformations in Research, Higher Education and the Academic Market* (pp. 171–186). Springer Netherlands.

Rutkowska, A. (2012). Istota kapitału ludzkiego i wybrane metody jego pomiaru. *Zarządzanie i Finanse*, *1* (10), 339–348.

Sam, C., Van Der Sijde, P. (2014). Understanding the concept of the entrepreneurial university from the perspective of higher education models. *Higher Education*, *6* (68), 891–908.

Shattock, M. (2005). European universities for entrepreneurship: Their role in the Europe of knowledge the theoretical context. *Higher Education Management and Policy*, *3* (17), 13–25.

Słopiecka, A. (2012). Współczesna koncepcja zdrowia i jej determinanty. *Studia Medyczne 1* (25), 85–88.

Sulejewicz, A. (2008). *Paradoks społecznej odpowiedzialności biznesu szkoły wyższej*. In: K. Leja (ed.), *Społeczna odpowiedzialność uczelni* (pp. 47–55). Gdańsk: Politechnika Gdańska.

Varela-Mato, V., Cancela, J.M., Ayan, C., Martín, V., Molina, A. (2012). Lifestyle and Health among Spanish University Students: Differences by Gender and Academic Discipline. *International Journal of Environmental Research and Public Health*, *8* (9), 2728–2741.

Wesołowska, M. (2013). Ochrona zdrowia jako obszar inwestycji w kapitał ludzki. In: S. Wawak (ed.), *Metody i techniki diagnozowania w doskonaleniu organizacji* (pp. 65–76). Kraków: Mfiles.pl.

Władyniak, A. (2003). Strategia Lizbońska: założenia, cele, stopień realizacji. *Wspólnoty Europejskie*, *5* (140), 47–52.

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GENERAL ACADEMIC AND PRACTICAL PROFILES – TWO TOOLS FOR CONSTRUCTING A GRADUATE'S SILHOUETTE IN THE FIELD OF FINE ARTS

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Abstract

The aim of the article is to present the specific character of the general academic and practical profiles in the field of fine arts that are not natural for the researched profiles i.e.: sculpture (artistic faculty) conducted in the practical profile and industrial design (design faculty) conducted in the general academic profile. The issue of artistic faculties with a practical profile is particularly significant when every faculty created by a newly established organizational unit of a university has to go through studies of the practical profile. The main conclusion resulting from the conducted research is the need to frame detailed and unique regulations on organising studies of the practical profile for artistic faculties.
The data for the research was collected using a participation observation conducted at Strzemiński Academy of Art Łódź between the years of 2009–2017; the result was presented with the use of a case study.

Introduction

When the idea to divide faculties into profiles – practical and general academic – appeared, it was natural to ask the question how to interpret the idea for each faculty taking into consideration their specific character, the position of each profession, or the kind of competencies offered on the labour market as the result of education.

Artistic faculties take specific place in the context of division into profiles. It seems that the idea of division is rather addressed to technical or economic faculties. In case of such faculties the number of graduates, their influence on the labour market, the relation between the graduate and the potential employer are in fact areas which require efficient management on the level of the country, the society or even globally. It is no wonder that one of the tools of such management can be the system of higher education constructed in a proper way.

However, in case of faculties where the number of students is rather low, in professions which are essentially very autonomous or èlite such as sculpting, painting, or theatre direction, the division into profiles can raise some doubts – is it reasonable or even possible to be realized? It is said, that in the context of general labour market professions such as a sculptor or an opera singer are so 'exotic' and rare that the factor of studies profile will not affect the possibilities of employment or a graduate's market efficiency in a significant way. Another argument, which stems from common sense and logic, is the fact that artistic jobs are performative as a rule, are deeply practical, even in the general academic profile and as a result, such division is artificial and irrational here.

Is it indeed the case?

General academic and practical profiles – in the context of legal rights

Regardless of the opinions on the topic, it should be emphasized that legislation (see Act, 2005) offers the possibility to create an artistic faculty with a practical profile (see Act, 2005, article 2, 9a, 11, 168a; Act 2014, article 2, point 18ea). It is also a fact that the requirements for creating new organizational units of universities (faculties) and creating new faculties for the units force the unit to start with studies of the practical profile when creating a faculty.

It is obviously a big challenge – the regulations regarding the way in which the practical studies should be organized evidently concentrate on sectors which are very far from art; the interpretation in the field requires a lot of ingenuity, a kind of intuition and, probably, first of all visionary thinking, a searching attitude, the will to create an educational tool which is supposed to prepare a modern graduate for the labour market (see Bogacz-Wojtanowska, Batko, Hojda, Wrona, Siorek, 2015; Clark, 1998, 2004), who could gain competitive advantage on the market (see Porter, 2001; Obłój, 1998; Kowalak, 2006).

In accordance with the definition of the general academic profile stated in the Higher Education Act, the essence of conducting studies of such profile is to introduce modules of classes connected with research into the curriculum. The legislator does not require job trainings on the faculty with the general academic profile; however, it does not block such a possibility. It is also important for the modules to constitute over 50% of the ECTS points obtained during the course of studies, thus, the curriculum should be constructed in such a way that it allows conducting research (see Act 2005; Act, 2014, article 2, point 18eb).

Student training known from technical universities indicate that contact with the 'future employer' is sometimes realized in a literal way and close co-operation of a university or a faculty with some specific stakeholder from the market makes (Piotrowska-Piątek, 2014, 2017) the studies take the role of a 'job agency' in a way. However, it should be emphasized that in the most valuable, symbiotic case – the entrepreneur is provided with contact with the precious new blood of experts and has direct guaranteed influence on their competencies (which is guaranteed in the form of studies). On the other hand, the educational unit gains the didactic and sometimes financial possibilities, to conduct studies and a thing which is nowadays priceless – the competitive advantage in the fight for those who

apply to study (see Obłój, 2002, p. 20), as they can promote the faculty by suggesting that the faculty is potentially a simple way to get employed (see Wytrążek, 2011).

Method

In order to illustrate the problem presented above, i.e. the characteristic features of the general academic and practical profiles as two tools for constructing the silhouette of a graduate in the field of fine arts the method of a case study was used[1] (Pieter, 1967). The data used for the case study was collected during a participation observation conducted by the co-authors of the text while creating and organizing different faculties in the discussed profiles, as well as during classes at Strzemiński Academy of Art Łódź between the years 2008–2017: the described cases in the practical (Faculty of Sculpture and Interactive Actions) and the general academic profiles (Faculty of Industrial and Interior Design).

The general academic and practical profiles – a case study

Qualified employees are precious and more and more rare acquisition. Well-organized teaching can become a stimulating factor for the development of the service market, which can be observed particularly clearly in the sector of design services. Nowadays, it is possible in Poland to teach in one of the two profiles: the general academic or the practical. The decision which profile is used while teaching depends on several factors. One of them is whether the faculty in question offers demand for its graduates on the labour market. It is common practice for external stakeholders – i.e. companies of potential employers – in shaping the teaching program.

The general academic profile – a case study

The above-mentioned requirements are particularly crucial when organizing the practical profile studies; however, it seems that they should be as natural also for – or even especially for – a design faculty such as e.g. industrial design. The analysed case focuses on the faculty with a general academic profile. Due to the established position of the Department which has been conducting the analysed faculty for over thirty years – it was assigned to the general academic profile. As the result, research and development became the crucial element of teaching such practical studies as designing. The authorities of the Department as well as teachers faced the necessity to organize work in a way that allows both students and teachers were involved in the R&D activity. It was possible because with the support of the University Technology Transfer Centre the Department has been co-operating with companies within the scope of competitions for implementation projects. Slightly modified form of contracts allowed the companies to extend the co-operation with research and development works. The essence of such activities is not always introducing products onto the market. Sometimes, it can be a small modification of the form of a product or even of a fragment of a production line or shortening the production process by simplifying the assembly. In such a form of co-operation the designer can have a lot of space to use his/her skills and his/her observations and research can impact multiple solutions in a company, even though they do not have to focus on the product itself.

[1] The case study method is treated as one of research methods. It is a thorough and versatile picture of few cases of a given phenomenon which aims at collecting empirical data. A deepened, detailed and multilateral analysis is supposed to substitute for large number of data which can be the basis for a statistical study. Sometimes, it can replace the statistical or experimental method.

Using such – holistic – methods can also positively influence the company's competitive advantage on the market by increasing the attractiveness of its goods and services or the comfort of work for employees.

The number of graduates who found permanent jobs or found their place on the labour market in another way is a very important feedback for the Department. Most often, graduates of the design faculty become self-employed as freelancers and offer their services as projects. If a curriculum is well-constructed and well-organized its graduates do not become unemployed or do not have problems on the labour market. Such a situation undoubtedly influences the increase or maintaining the quality of education on the same high level. It turns out that contact with companies and real orders is one the best working factors which shape young designers. Getting to know the reality of co-operation early, students learn to compromise, to show their vision in a clear and precise way in a form of project presentation, to develop their skills in 3D programs or create interesting solutions on the plane in 2D graphic programs. In such a situation it is definitely more difficult to get disappointed when facing the reality of the market, which can happen after studies which idealize the world and are not open to the expectations of potential employers. Thus, it seems justified to say that practical design studies in the general academic profile does not have to or even should not lead to a situation where they are far from the reality of the market. Implementing companies in the procedures of research and development can offer very good effects and can lead to increasing the value of products and services. It can also impact the quality of education and increase the competencies of students in a positive way. It seems that the future will bring stronger co-operation between education and industry, especially with the new EU programs which help finance research and development works and scientific research in companies. Combining practical experience of companies with innovative approach of students guided by experienced teachers, often also practitioners of designing, can lead to very interesting effects.

Practical profile – case study

The factor which in a natural way constructs the practicality of a profile on the faculty of sculpture is actually, the above mentioned perfomativity and workshop of the profession. The appeal for large numbers of laboratory classes for the practical profile is obvious; a huge number of subjects on the faculty of sculpture are workshop subjects. The acquired competencies include a large percentage of physical work. Thus, such a reference is natural. However, it should be emphasized that in the current situation it is difficult to say unequivocally how to differentiate the practical profile from the general academic profile in the context of a sculptor's profession.

Let us focus on another sphere i.e. the contact of a student, a future graduate, with the potential labour market. In the construction of general academic studies the contact is provided via training system. In case of the practical profile the training should be extended, not only via the number of hours, but also through the relation between the student and an employer (as far as to a contract of employment during the course of studies) and via a broader spectrum of those who offer trainings in order to shape the student's idea in terms of future professional 'arena'.

How can the above solution be used in case of an artistic faculty, such as sculpture? It seems impossible – we all know there are no 'factories for sculptors' which hire on the basis of work contracts. An exception can be the field of education of various levels i.e. the possibility to get hired in a primary school as an art teacher or in a culture centre...

In this context the training system is not obviously only a way to find potential employers for the future sculptor-graduate in this narrow scope mentioned above. Network of stakeholders should be constructed in such a way that on one had it should give a student some taste of the width and flexibility of the market which can use his/her

sculpting competencies, and on the other hand it should stimulate him/her to look for his/her own way to describe his/her strong points which make him stand out among other professional sculptors. Stimulation towards searching for one's own solutions and the network of relations with the market is a separate issue.

Generally, the practical profile for sculpting, seen as the participation of external entities in the course of studies as far as the form of dual studies, should create a kind of training area conditions similar to his/her future professional environment – relations with cultural institutions, business entities, the processes inside the environment etc.

It is hard not to notice that current practice at various universities does not take into consideration the fate of an artist after graduation. Using the master-student relation as the necessary and permanent situation often leads to a situation where a graduate is forced to experiment in order to find the methods of functioning on the market on his/her own because the studies present reality as a safe harbour of a workshop.

However, we might risk saying that, especially in the context of reflections concerning the practical profile of studies, the above formation is largely based on stereotypes or even myths which are popular in the general opinion. Nevertheless, the fact that the stereotypes are also presented more or less officially by the representatives of the profession of sculptors, many teachers, theorists in the field and are reflected in the education curriculums is even worse.

Another question, which stems from the requirements for the practical profile studies, is the choice of staff. The idea that on the practical profile at least half of the teachers had professional experience from outside the university is often inherent for a teacher-artist; it is so common that it is even unaware. There are of course exceptions, units so symbiotically connected with the university, that they are unaware of the existence outside it.

Here, the situation is delicate – in this specific sector of art, where the quality of education depends on such nondiscursive components as the alleged *genius loci* of the university campus, which impact creative attitudes and students' inspiration. The employers' mobility can sometimes be contrary to the educational value of the university, if it is built on the idea of the so-called 'eternal order of tradition'.

Conclusions

As always, the solution is obviously balance and proportion – it is a manager's task to manage human resources in a way that does not cause any loss – either from tradition or the one built as the answer to the dynamic contemporary times. And here another use for different profiles emerges – to what extent should the graduate's professional fate be the verifying factor of the above mentioned proportion in comparison to the functioning of the university itself or its subordinate unit – as an educational centre? Introducing different profiles suggests indirectly that these goals require separate tools.

Coming back to the issue of practical profile in general in the context of a sculptor's job - the question discussed above i.e. the commercial (in broad sense) existence of a graduate of an artistic university is the aim which can (and should) be a priority when constructing artistic studies with a practical profile. Let us emphasize clearly, the aim is not to degrade the artist' profession, to make him/her a craftsman, an expert without the artistic independence and freedom, the ethos achieved for centuries. The practical profile is a possibility to construct an artist's – a graduate's silhouette in such a way that s/he could function independently in the contemporary world using his/her creative autonomy. It is a chance to give him/her a kind of arms to protect his/her talents, needs and ambitions against the hardships of market existence.

What is more, the fact that graduates of the faculty of industrial design at Strzemiński Academy are firstly seen as artists, should motivate them and the management of the faculty to work harder on combining artistic activity – which can be and often is designing – with the expectations and reality of the labour market. We should assume that it is possible to create a perfect situation in which the vision of an artist (a designer educated in the general academic profile i.e. connected with research and development) can be joined with extremely precise expectations of an employer who has technology and budget for implementing a product.

The described cases in the practical (Faculty of Sculpture and Interactive Actions) and the general academic profiles (Faculty of Textile Art and Fashion Design) are still being corrected and improved in order to increase the quality of education, facilitate graduates' position on the market and increase the comfort of teaching.

References

Act as of 27.07.2005 Higher Education Law. Journal of Laws of 2005, no. 164, position 1365.

Act as of 11.07.2014 concerning the change in the act of Higher Education Law and some ther acts. Journal of Laws of 2014, position 1198.

Act as of 5.07.2005 Journal of Laws of 2005, no. 11964, position 1365, i.e. Journal of Laws of 2016 position 1842, Announcement of the Marshal of Sejm of Poland of the 26th October 2016.

Bogacz-Wojtanowska, E., Batko, R., Hojda, P., Wrona, S., Siorek, B. (2015). *Ogólnopolskie Badanie Losów Zawodowych Absolwentów Uczelni Artystycznych*. Retrieved from: http://www.artystapostudiach.pl/public/Og%C3%B3lnopolskie%20Badanie%20Los%C3%B3w%20Zawodowych%20Absolwent%C3%B3w%20Uczelni%20Artystycznych%20-%20raport%20og%C3%B3lny.pdf (19.07.2017).

Clark, B.R. (1998). *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. New Jork: Pergamon Press.

Clark, B.R. (2004). *Sustaining Change in Universities. Continuous in Case Studies and Concepts*. New York: Society for Research into Higher Education & Open University Press.

Kowalak, B. (2006). *Konkurencja gospodarka – innowacje, infrastruktura – mechanizmy rozwoju*. Warszawa–Radom.

Obłój, K. (1998). *Strategia organizacji – W poszukiwaniu trwałej przewagi konkurencyjnej*. Warszawa: PWE.

Obłój, K. (2002). *Tworzywo skutecznych strategii – Na styku starych i nowych reguł konkurencji*. Warszawa: PWE.

Pieter, J. (1967). *Ogólna metodologia pracy naukowe*. Wrocław: Ossolineum.

Piotrowska-Piątek, A. (2017). External Stakeholders of Higher Education Institutions in Poland: Their Identification and Significance. *Education and Society*, *1* (35), 43–61.

Piotrowska-Piątek, A. (2014). Relacje szkół wyższych z interesariuszami zewnętrznymi. Konwent jako organizacja pomostowa. *Zeszyty Naukowe Politechniki Śląskiej, Seria: Organizacja i Zarządzanie*, *76* (1923), 167–178.

Porter, M.E. (2001). *Porter o konkurencyjności*. Warszawa: PWE.

Wytrążek, W. (2011). *Działalność twórcza i artystyczna jako szczególne przypadki działalności gospodarczej*. In: H. Gronkiewicz-Waltz, K. Jaroszyński (eds.), *Europeizacja publicznego prawa gospodarczego*. Warszawa: C.H. Beck.

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LIVE STREAMING AND ITS RECEPTION AMONG THE RECIPIENTS

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Abstract

Live streaming is becoming an increasingly popular form of transmission of information to its audience. With the help of various applications, the user can at any time record the message and put it on the network. The reach offered by live streaming is very large. The issue of publication oscillates around the problem of live streaming as an emerging form of reaching the public. The publication will analyze whether this is a positively received form of information transfer or whether it is a little developed medium, what are the opportunities in the market of live streaming and whether or not this medium can ultimately influence the building of customer relations. This issue will be presented in theoretical terms on the basis of a literature review of the area and on the secondary and own research.

Introduction

Increasing computerization, as well as the high popularity of social networks, makes it possible for modern recipients of marketing communication to have almost unlimited access to a variety of communications about the company and its services and products. Importantly, the content in question is both planned and controlled by the company as well as casual and non-formal (Rogala, 2014).

Video content is a very important part of communication to consumers. Mark Zuckerberg, founder of Facebook, announced in early 2016 that the daily video play time on Facebook totals up to 100 million hours (How to broadcast live video on the Internet). This scale only recognizes the importance of the content being recorded and placed on the web. More and more people are using live recording and displaying it in social media or other web portals. The aim of the article is to characterize the issue of live streaming, and based on the example of actions performed by the West Pomeranian Voivodeship, showing the effectiveness of this tool.

Live streaming – usage possibilities

Live streaming is a service that transmits video content in real time. Broadcasts include sports events, concerts, interviews, conferences or presentations of new products and services (Live streaming without secrets). Livestreaming is increasingly used by companies and individuals. With the development of technology on the market, there are more and more tools to broadcast live events.

Meerkat and Periscope were one of the first streaming dedicated applications. The first one appeared on the market in 2015, the second a month later. Meerkat has gained popularity thanks to its use by Hollywood stars, and the latter because it is a Twitter application. Table 1 provides an overview of the applications used for streaming.

Table 1. Applications used for live streaming

Name of application	Description
Periscope	This is an application from Twitter (purchased by Twitter in March 2015), through which the users can start broadcasting their event to observers – open group or specific audience, at any time. In addition, if the author makes this possible, you can return to the movie with the "replay" function. The video is available 24 hours after publication. In August 2015, it was announced that it had reached a number of 10 million users worldwide. According to the website data, each day the video playback time totals 40 years. This application is available for Android and iOS devices. A Twitter account is required.
Meerkat	An application similar to Periscope, however, differs in several details. One of them is the ability to interact with recipients with built-in chat and real-time commenting. In addition, the retransmission button lets you forward the video you're currently viewing to your Twitter account. You need a Twitter profile to establish a Merkaat account. The application can also be linked to a Facebook account. After Periscope marketing, Meerkat blocked many features of the site, leading to a loss of users and a drop-in viewership. It is available on Android and iOS devices.
Facebook Live Video	From January 2016, live streaming on Facebook was available only for verified fan pages of public persons. Since April, this has been made available to all Android or iOS application users. Facebook users are alerted to the presence of their friends or favorite live videos, and a special counter keeps track of the number of viewers.
YouTube	Also offers the possibility of live broadcast. It's enough to have your channel on YouTube to start live streaming at any time. With the live chat function, you can stay in touch with your viewers, and the ability to share a link to your broadcast helps to increase the reach of your stream. The recording is automatically saved and after a maximum of 12 hours, appears in the Movie Manager.
Google Hangouts	Live broadcasts are only available to logged in users in their Google+ account. Live streaming can be broadcast as public or private and can be shared on one's website. In this case, the meeting is also recorded automatically and published on the YouTube channel.
Livestream, Ustream	Allows to reach a specific audience

Source: own elaboration based on: Live streaming – how to use it in marketing? Retrived from: https://poradnikprzedsiebiorcy.pl/-live-streaming-jak-korzystac-z-niego-w-marketingu; How to broadcast live video on the Internet http://pl.ccm.net/faq/8580-jak-nadawac-wideo-na-zywo-w-internecie.

Live streaming is increasingly being used by marketers because of the speed with which they reach their customers, their ease of communication, and the desire to watch their recordings. It is most often used for

broadcasting events (conferences, fairs, concerts), promotional campaigns, webinars. Live broadcasting can also be a tool for building your own brand by sharing your life, showing where you are and what you do, expressing your opinions. The live broadcast service has its pros and cons. The benefits include:

- direct form of communication,
- reaching the recipient faster and easier,
- faster dissemination of information,
- reaching out to the Z generation.

Moreover, they provide (Live streaming without secrets):

a) flexibility – transmission can be placed in different locations, depending on needs and requirements. Choice of place depends on having a well-developed channel on YouTube or a fan page with a large number of likes;
b) following trends – live streaming appears in many publications as one of the leading trends in 2017: "5 Social Media Trends That Will Dominate 2017", Forbes 2017, "Online Marketing Trends to Watch in 2017", InfoGraphic Design Team 2016, "7 Online Marketing Trends That Will Dominate 2017," Forbes 2016, "Four trends that will redefine media in 2017", Marketing Week 2017;
c) unique experience for viewers – the broadcast organizer can give the viewers a unique (one-off) experience – a limited time offer – that is presenting an offer that only viewers may benefit from;
d) direct communication with customers – allows you to meet the needs of customers, answer their questions in real time;
e) interaction between customers;
f) the ability to conduct surveys;
g) access to analytical data – total number of viewers, maximum viewership, average online watch time and demographics;
h) customizable needs – color matching player, chat and logo can be adjusted.

Online transmission reaches everyone, regardless of platform – mobile, tablet and PC. This is quite significant, given that research shows that more than half of video content is currently being viewed on mobile phones. Online transmissions are not subject to physical restrictions such as the size of the room or the length of time that occurs in stationary events. Additionally, due to the fact that the broadcast is being recorded, it can be later posted anywhere in the retransmission format, accessible to people who could not watch the broadcast online.

Facebook Live streams can be broadcast publicly, people typically only come across streams broadcast by people they follow, either via notification or when a stream appears in their newsfeed. Users may also find event live streams by browsing using the Facebook Live Map. Facebook Live streams offer several types of interaction: comments, which are persistent and appear to the right of the video for viewers and below the video for broadcasters; and reactions, including Like, Love, Haha, Wow, Sad, and Angry, which, when clicked or touched by the viewer, first show a small photo of the viewer's face which turns into the reaction's emoji while floating across the video screen (Haimson, Tang, 2017).

On the other hand, there is a lack of transmission scenario, which may result in the appearance of unwanted images or content. Not everyone may accept the kind of broadcast event or the view expressed.

However, recent popular mobile video sharing platforms have been much more global in nature. Instagram, Vine and Periscope (along with other popular live-streaming apps such as Meerkat and Twitcast) are conceptualized

as geographically agnostic in terms of content rights, with no current tools for geographical restrictions in place (Rugg, Burroughs, 2016).

Onet Rano in Western Pomerania

"Onet Rano" is the first program in Poland that is broadcast live from the car – mobile studio. It takes place from Monday to Friday from 7.55 to 9.30. The program is live on the Onet Rano website and on Facebook. The program is led by Jarosław Kuźniar, until recently a TVN24 journalist leading the morning program Poranek TVN 24. Kuźniar drives his car in Warsaw every morning and talks with his guests, then he reviews the press and holds discussion in Onet studio. The host invites people from different areas and they comment on current events. "Onet Rano" features familiar faces, popular commentators from the media, politics, culture, sports, business (Onet Morning).

"Onet Rano" program has been broadcast since September 30, 2016. Kuźniar previously communicated with his viewers via the Periscope application from his private car. Premiere episode of "Onet Rano" on Friday, 30th September recorded more than 852,000 views live and more than 250 thousand views on VoD.pl. The program was also broadcast on the Facebook Live platform, where a total of over 97,000 views and post-releases were recorded (Visibility of the premiere of "Onet Morning").

From the information provided by Onet, the first 20 live episodes of the program had on average more than 800 thousand views on the portal's main site and its Facebook fan page (where they are broadcast via the Facebook Live option). The average live viewing time of each episode was 11 minutes. Then all the episodes are available at VoD.pl. On average, they recorded over 200 thousand views (Every episode of "Onet Morning" by Jaroslaw Kuźniar with a million plays, live watched for 11 minutes).

Jarosław Kuźniar says in interviews that new technologies have some advantages over television: "Today, technology and new media allow everyone to be a broadcast medium. The fact is that it gives you a lot more freedom, but (...) we are imposing on ourselves a style that enforces the highest quality. When you need to do something qualitatively good, it does not bring too much comfort. First of all, the Internet does not have a budget as big as corporate television. We realize that for the viewer it does not matter who produced it, he/she just wants it to be good. So, we do not have the comfort, but we have a lot of flexibility. Because if we talk after the program today, we draw conclusions and we know that it is necessary to improve, add here, cut off there, we change it starting from tomorrow, and we do not wait until the end of the season. We are looking at viewership results and then we decide " (Jarosław Kuźniar).

In addition, he adds that live streaming shows viewership immediately, so if something goes wrong, you can improve the next episode without waiting for the next season. The journalist also refers to an example of a well-known American CNN station, which broadcasts the event with a 2-minute live entry, followed by a 20-minute Facebook entry.

Several programs "Onet Rano" during the year are conducted outside Warsaw, in places where Onet Rano is invited. One such place was the West Pomeranian Province, i.e. city of Szczecin. Onet Group together with the Marshal Office of the Western Pomerania Voivodeship prepared a program whose main purpose was the promotion of the Społecznik Program. This is a pioneering activity in Poland, where PLN 1.5 million will be distributed in grants to people who are active in the voivodship.

The program is a response to the current cooperation with the NGO, which has shown that it is also necessary to support those who are not a part of an association and have fantastic ideas. Microgrants were available to everyone in Western Pomerania and could be spent for cultural activities, charity, neighborhood actions, preparation of small infrastructure (Program Społecznik start).

The day before the scheduled live broadcast, a group of Onet employees came to Szczecin. Arriving in the city, they broadcast live. The reaction of the people on Facebook was surprising. There were 260 comments in which the "Onet Rano" team was greeted, the inhabitants wrote what they could visit in Szczecin and what to do in their spare time. The recording was played 15 times in total (Figure 1) and gained 543 likes.

Figure 1. Facebook post recording entry to Szczecin in figures

Source: https://www.facebook.com/onetrano/?hc_ref=ART2hizlhZZ-wnu-U7b45IsGKp3fML08RNHzMUBbWPb4SW0a0h-10QdabJtLO48Yb2Q&fref=nf.

The next morning "Onet Rano" was held. During the 2-hour drive through Szczecin streets, Jarosław Kuźniar spoke with people who, through their involvement, made changes in the areas in which they operate. The activities presented are often consistent with the nature of the promoted Społecznik program, and are meant to motivate others. The recording (Figure 2) was displayed 91 thousand times, gained 880 likes, 622 comments were written during the program, and the recording was made available by viewers 209 times. The figures show the huge success of the promotional campaign and, secondly, the huge involvement of the live program viewers. During live streaming, the number of viewers was around 1,000 people.

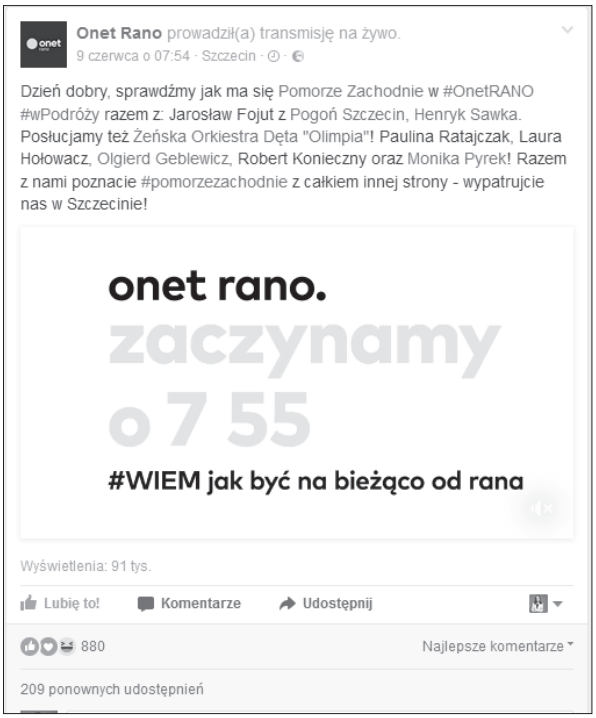

Figure 2. Facebook before recording entry to Szczecin in figures

Source: https://www.facebook.com/onetrano/?hc_ref=ART2hizlhZZ-wnu-U7b45lsGKp3fML08RNHzMUBbWPb4SW0a0h-10QdabJtLO48Yb2Q&fref=nf.

The example shows that live streaming has tremendous power to reach the audience. In this case, it can be said that the popularity of the program leader and the popularity of the program "Onet Rano" largely contributed to the success. The creators of the program do not limit themselves only to the live recording. Then, based on it, they make shorter recordings that are posted on different fan pages at different times. For example, the Onet 100 fan page had a presentation of a wrap-ups from a stay in Szczecin, which within 3 months of recording the program received over 960 thousand releases, 2,300 likes and 3,240 re-releases. It should be noted that Onet 100 is on Facebook one of the smaller formats of Onet and this site is liked by 110 thousand people.

Conclusion

The presented data illustrates the strength of live streaming and the number of recipients that can be reached with this tool. Numerous examples of the use of live streaming also show that it is a service involving a large number of consumers in real time. This makes it possible for the customer to be engaged in watching and commenting on the event, asking questions online, and getting answers. Therefore, live streaming is becoming increasingly popular in the organization of training. The participants can listen to it anywhere, from any mobile device and keep up with the leader's questions and discussions with other participants in the training.

The live streaming awards as a leading trend in 2017 also confirm that this service will continue to evolve. It is up to the marketing people to use the creativity of this tool and the commitment of consumers. However, it should be kept in mind that not every live streaming shown on the net has to be a success for the company.

References

Every episode of "Onet Morning" by Jaroslaw Kuźniar with a million plays, live watched for 11 minutes. Retrieved from: http://www.wirtualnemedia.pl/artykul/kazdy-odcinek-onet-rano-jaroslawa-kuzniara-z-milionem-odtworzen-na-zywo-ogladany-przez-11-minut#.

Haimson, O.L., Tang, J.C. (2017). What Makes Live Events Engaging on Facebook Live, Periscope, and Snapchat, CHI Denver, CO, USA.

How to broadcast live video on the Internet . Retrieved from: http://pl.ccm.net/faq/8580-jak-nadawac-wideo-na-zywo-w-internecie (1.08.2017).

How to broadcast live video on the Internet. Retrieved from: http://pl.ccm.net/faq/8580-jak-nadawac-wideo-na-zywo-w-internecie.

Jarosław Kuźniar. Retrieved from: http://www.prestizszczecin.pl/magazyn/106/ludzie/niewyspany-jaroslaw-kuzniar.

Live streaming – how to use it in marketing? Retrieved from: https://poradnikprzedsiebiorcy.pl/-live-streaming-jak-korzystac-z-niego-w-marketingu.

Live streaming without secrets. Retrieved from: https://filmpoint.pl/blog/live-streaming-bez-tajemnic.

Onet Morning. Retrieved from: http://wiadomosci.onet.pl/onet-rano.

Program Społecznik start. Retrieved from: http://www.wzp.pl/biuro-prasowe/biuro-prasowe/aktualnosci/rusza-program-spolecznik.

Rogala, A. (2014). The Challenges of Integrated Marketing Communications in the Era of Information Society. *Marketing i Rynek*, *11*.

Rugg, A., Burroughs, B. (2016). Periscope, live-streaming and mobile video culture, Geoblocking and Global Video Culture. Publisher: Institute of Network Cultures.

Visibility of the premiere of "Onet Morning". Retrieved from: https://www.signs.pl/ogladalnosc-premiery-_onet-rano._,30151,artykul.html.

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FITNESS MARKET IN POLAND AND ITS DETERMINANTS

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Abstract

The aim of the article is to identify the key factors of the development of the fitness services market in Poland, taking into account the social and economic functions of the entities operating on this market. Authors were used the methods of observation and analysis, with dates and statistics from secondary sources from the world and Poland, as well as the results of the authors' own research published in other reports.
The paper is listing a broad spectrum of factors influencing the development of the fitness services market, assigned to 4 groups: political and legal, economic, social, technical and technological (PEST). In summary, Authors ware pointed out that the results are related with general megatrends of the world economy as well as the specifics of the development of the Polish economy and other areas of social life for last few years.
Research and inference focuses on the analysis of the overall sport activity Polish residents, the popularity of sports, the role of selected fitness clubs and operators in the development of this market. Managers of many companies operating on the market can use described in the paper examples of fitness operators in Poland.
This article is a kind of review and at the same time a presentation of a concept of development of fitness services in the contemporary Polish economy.

Introduction

The fitness market in Poland has grown dynamically in both supply and demand side for the last few years. It is necessary to define the concept of the fitness market in terms of subject and subject, and to present the role of individual entities operating on this market.

Analysis of reports of public and private institutions, both domestic and abroad, shows the dynamics and causes of the development of this market. Poland is ranked as one of the 10 most attractive countries for fitness market development in Europe. The authors point to a broad spectrum of factors influencing the development of the fitness services market. They analyze the external sources and develop their own research of these factors using the PEST technique. Authors identify factors that promote growth or limit development of fitness services in Poland.

The study and conclusions focus on analyzing the various forms of sport activity of the Polish population, the popularity of sports, the involvement of enterprises in the development of the fitness market. Authors are aware of the limitations associated with these studies and the conclusions and by analyzing only a part of the market. There are access was hampered by only few reports of the market in Poland.

There is still lack of statistic of the market, the reports are irregular, and there are different methodology of research and terminology. Forecasting limitations is also a result from the high dynamics of changes in the companies on the market and/or the development of services (offers) in fitness clubs. The topic related with fitness services seems particularly interesting, because the market has not yet been thoroughly explored, especially in terms of the many different functions of this form of recreation and sport activity and the economic effectiveness of private and public operators on the market.

This article is of a review, contains actual data on the development of this market in Poland as well as a wide overview of perspectives on the customer service process on institutional and individual fitness market. The article concludes with a summary of the concept of fitness services development in the contemporary Polish economy.

Fitness services market – subject and object approach

The market in terms of economics is defined as the general relationship between sellers and buyers. The sellers (they represent supply side of the market) have to offer exchange items (products, services, jobs, etc.) and the buyers (they are demand side of the market) are interesting in purchase of the products. Operators representing supply and demand, they participate in the process of shaping these categories and their correlations (Wrzosek, 2002).

There are various criteria for market segmentation in the literature (Wrzosek, 2002): the criterion of exchange items (product market, service market, labor market, money market), criterion of market actors (referring to the type of entities and their number on the supply and demand side), spatial criterion (spatial extent of promotional campaign).

To understand the market in subject, there are no products but on the market are the main functions of the products, expressed in the ability to meet specific needs. The market by object is the type of consumers and buyers demanding a variety of products (Niestrój, 1996).

The fitness market can be distinguished by accepting the criterion of market segmentation, the needs of those interested in maintaining or improving their physical condition, appearance or well-being, the need for physical activity using specialized equipment outside their place of residence.

In terms of marketing, buyers on the market are the ones submitting such needs (Kotler, 1994), and in economic terms of market there are suppliers and consumers of various products being traded to meet any of the needs described. The subject of the fitness market deals with services aimed at offering human psychological and sociological well-being, combined with the pursuit of optimal physical fitness (Panfil, 2016).

Considering the nature of the clients and the manner of his conduct, in the economy can also be distinguished (Fonfara, 2015): consumer market and institutional market (B2B – "business to business" or enterprise market).

There is growing interest of institutional clients (both non-profit organizations, public administrations, and profit-oriented enterprises) in the fitness services market in the purchase for their employs of various service packages (Raport, 2015) offered by fitness clubs. Fitness club is specialized facility, where fitness services are provided.

Individual clients in the fitness services market are a specific and highly diverse social group. Their preferences change and develop under the influence of many factors. Predicting these changes, identifying the main determinants influencing the behavior of the buyers and their preferences, seems to be one of the key success factors for companies operating in this market.

The characteristics of the community, the society in which the individual client lives, are coming from individual characteristics, so, the society consist of the individuals from which it was formed (Gardawski et al., 2008) and can be described in economy by many features. Then it will be a market – a specific market, e.g. fitness services market.

Given the market in economics, there is also a supply side. The supply side includes a group of market entities that provide tangible and intangible products to meet customer needs. On the supply side of the fitness market, there are gyms with fitness services, swimming pools with extracurricular activities, other sports facilities, as well as hotels with sports facilities, multifunctional large facilities with exercise rooms and activities as well as fitness clubs. On the supply side of this market are also suppliers for which the fitness market is an added market.[1] There are also instructors, trainers, or media professionals promoting fitness on the supply side of fitness market.

It is interesting to note that the market for fitness also included entities coordinating the development of this market, the so-called coordinators who use direct contacts with corporations, legal and tax expertise, to become advisors to institutional clients in fitness services for their employees.

In Poland, coordinators offer cards with access to a wide range of fitness services – the so-called: sports and leisure loyalty cards, usually dedicated to employees.[2] These cards allow access to physical activity classes (including swimming pools, gyms, fitness centers, etc.) in all cooperating institutions, with no time limits and declarations for the use of sports facilities in Poland. It is estimated that loyalty cardholders are about 50% of people exercising in fitness facilities in Poland (Pestka, 2015).

Developing the fitness services market in Europe and in Poland

Sport is a diverse and multifaceted field of human life.[3] Research and statistical institutions are attempting to measure this phenomenon for the purpose of monitoring its state and collecting data that are necessary for decision-making process in the sports services market. And the fitness market is part of the sports market and is related to the same processes.

Contemporary sport can be treated as a lifestyle, aiming to improve physical and mental health but sport is also an economic phenomenon that is subject to professionalization and commercialization (Sznajder, 2015).

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[1] Eg, food manufacturers supporting the physical activity of individuals exercising, manufacturers of equipment of the fitness clubs, clothing producers, or ICT providers).

[2] The most popular are: Multisport, OK System, Be Active, Fit Profit.

[3] Persons using fitness services are participating in sports activities by this way. They are able to ad hoc or in an organized way influence physical fitness or mental health, develop social relationships or achieve sports performance at different levels.

Fitness services on this market are also subject to this process. There is a process of improving the management of fitness clubs on the market. Fitness clubs offer have wider range of services year by year. The clubs organize group and individual activities with professionals in the field, offer extensive methods of physical activity funding, or forms of contact with the client (including online services).

The fitness market in Europe is developing (*European*..., 2017) towards the growth of low-cost clubs with limited customer support.[4] It is also expected to further consolidate the market and its further development of fitness clubs chain groups.

Healthy lifestyle is becoming more and more popular in the modern world, and consequently the popularity of various sports activities is growing. The study of sport activity in Poland in 2013 (Raport z badań, 2013) showed that two thirds of the respondents (66%) had sports or exercise during the year, 40% taking physical activity regularly and 26% sporadically. Sporting is primarily the domain of young, well-educated people, satisfied with their financial situation, urban dwellers (Raport, 2015). The inhabitants of Poland most often practice sports for health (70%) and for pleasure (61%). Nearly every second physical activity participant declares that he exercises for a better mood to relieve stress, be in good shape (47%).

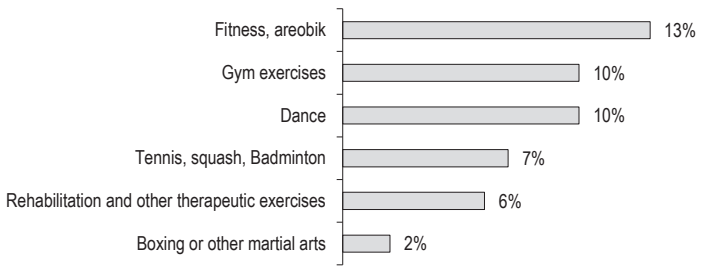

Figure 1. Sport activity of the inhabitants of Poland for selected occupations in indoors venues

Source: own elaboration based on report (Raport z badań, 2013).

There are the most popular are fitness and aerobic venues (13% of respondents) in Poland, considering the sites of sports activity in Figure 1. According to this, there is the number of facilities, where in modern air-conditioned rooms, on brand new equipment, under the supervision of qualified instructors who want to improve or maintain physical fitness can do it. The development of material infrastructure is accompanied by the development of new forms of financing using motivational systems, where benefits – such as gym cards – are the second most popular non-salary motive offered to employees.

In Europe more than 56.4 million people attend to fitness clubs. This number is bigger about 4.4% than a year ago (The European Health & Fitness Market, 2017). The European fitness market is worth over € 26.3 billion (Table 1). The Polish fitness market is one of the top 10 markets in Europe and one of the most dynamically

[4] E.g. Mrs. Sporty in Poland.

developing. In December 2016 in 2,560 fitness clubs in Poland already had 2.835 million clubbers (Table 2), which gives about 1,710 people per fitness club (5 times less than in Germany or Great Britain).

Table 1. European fitness clubs market in 2016

No.	Country	Revenues (mln Euros)	Share in the European market (%)	Share cumulatively (%)
1.	Great Britain	5,108	19.39	19.39
2.	Germany	5,050	19.17	38.56
3.	France	2,465	9.36	47.92
4.	Italy	2,215	8.41	56.33
5.	Spain	2,171	8.24	64.57
6.	Holland	1,324	5.03	69.59
7.	Russia	1,180	4.48	74.07
8.	Turkey	1,015	3.85	77.93
9.	Poland	842	3.20	81.12
10.	Switzerland	842	3.20	84.32
11.	Others	4,131	15.68	100.00
European market total		26,343	100.00	

Source: study on report European Health & Fitness Market Report (2017).

Experts say, that total numbers of members of fitness clubs in Poland can increase to 4 million in a few years, including a large proportion of older people. By analyzing the index of penetration (the ratio of the number of members of fitness clubs to the population of the country) among the top ten fitness markets in Europe, the highest (over 16%) indicator is in the Netherlands (Table 2).

Table 2. Countries with the highest number of members in fitness clubs in Europe in 2016

No.	Country	Numbers of fitness club members (million)	Penetration index ratio (%)
1.	Germany	10.080	12.30
2.	Great Britain	9.250	14.10
3.	France	5.460	8.20
4.	Italy	5.250	8.70
5.	Spain	5.060	10.90
6.	Russia	2.920	2.00
7.	Holland	2.840	16.70
8.	Poland	2.835	7.40
9.	Sweden	2.080	21.10
10.	Turkey	1.900	2.40

Source: based on European Health & Fitness Market Report (2017).

In Poland, the penetration rate is 7.4%, which is below the average for all analyzed countries, which is 8.1%. The Delloite Report, uses a wide range of definition of a fitness club. The fitness club is a venue open to all people, with facilities dedicated to sport, which has equipment for endurance training, fitness and physical fitness. For the

total number of fitness clubs, the report also includes swimming pools and dance schools only if they have fitness rooms. In Poland in 2016 there were 2,560 fitness clubs and a year before it had 2,520. So the market is growing. Older venues are closed (European Health & Fitness Market Report, 2017).

Some authors point out that the fitness market has become a highly profitable market for innovation, especially micro and small businesses in the area of process and product innovation (Kantyka, Maciąg, 2013). However, it should be remembered that in Poland also develop network fitness clubs.[5] As it was mentioned earlier, in December 2016 in Poland there were a total of 2,560 fitness clubs, with 216 of them being network clubs, i.e. 8.4%. Despite the small share of network clubs, watching the other services market (e.g. hotelier) it seems that these networked clubs may be the source of further professionalization of services and impose certain standards in this market.[6] Clients in modern fitness clubs can use a wide range of services. They can engage in the process of creating offers at the emotional, physical, intellectual and even emotional levels. It is related with the development of experience economy (Pine, Gilmore, 1999). There are suspecting that the development of fitness clubs will be located in the broader context of social life.

Impact of selected conditions on the functioning and development of the fitness market in Poland

There are some factors that influencing on fitness market in the world and in Poland, both on supply and demand side. As a result of the analysis of many sources, the authors identified key determinants in the fields of PEST[7] and showed their impact on fitness market in Poland.

Table 3. Key determinants of the development of the fitness market in Poland

The determinants	Impact on fitness market in Poland
1	2
Political and legal determinants	
Law regulating the performance of certain professions*	This may limit or eliminate requirements for the performance of certain professions, including those related to the fitness of club fitness clients. It may increase competition in the market, more creativity in the preparation of service packages, the involvement of those who have not been professionally involved in consulting.
EU standards and directives	Club fitness managers should observe documents related to, for example, recommendations related to the physical activity of the population, sports, the role of sport in the life of the European Union citizens
Resolutions of municipal councils, city councils (e.g. budget for sports activities)	They are important, for example, in the case of product preparation – events, extracurricular activities, where cooperation with public institutions operating in the municipality may be undertaken. Cities in Poland attach great importance to sport, but expenditures on the promotion of physical activity of residents are varied. Physical activity programs for older people or subsidies for large families may appear.
Economic and financial determinants	
Interest rates on investment loans	Managers must observe different economic indicators and, in the case of high financial burdens and unfavorable alternatives, may lead to less flexibility in the price of a club fitness product and less inclination to search for new products for clients.
Seasonality of demand	A large number of customers in the afternoons will cause the club's fitness manager to try to raise prices for services during this period.

[5] E.g. Calypso, Jatomi Fitness, Fabryka formy, Fitness Platinum, S4 Fitness Club, Energy fitness, Fitness Academy, Zdrofit, Fitness World, Mrs Sporty

[6] This is confirmed by the diversified structure of capital, the wide overview of the fitness market in Poland in the world, the high motivation for further development caused by shareholders' expectations.

[7] Political-legal, economic, socio-cultural and technological.

1	2
Economic development of the regions	This is a strong factor strengthening the process of improving the quality of the offer and expanding it with new additional services for companies and increasingly prosperous customers.
Business assistance programs	It is important to observe EU programs as well as local initiatives, as they can significantly support material investment as well as staff training or promotional activities of a club fitness product (e.g. trips to foreign fairs).
Socio-cultural determinants	
Demographic change	More and more women and older people participate in fitness clubs. The offer for them is constantly widened, for example, in the organization of new classes and new partners for loyalty programs.
Active lifestyle	The popularity of sports activities promotes the enrichment and expansion of the offer for the residents as well as the offer for hotel guests and other visitors for recreation and active leisure time in the fitness clubs.
Increasing willingness to participate in events	Modern equipped exercise rooms, with multimedia equipment, are more and more important to clients. And offer of modern fitness clubs is combined with admission to other sporting events.
Technological and technological determinants	
Development of public infrastructure	With the development of public transport – the availability of public transport allows managers to raise prices for certain services in fitness clubs located in city centers, near business facilities, hotels
Automation	The security or the organization of the space around the club's fitness area (parking area) is supported by modern automatic technology, which raises operational costs but also makes it possible to distinguish itself in a competitive market.
Internet and mobile technologies	The tendency and ability of customers to use the Internet contact form is growing. This necessitates more care for fitness managers in the form of Internet communication as well as organization of the customer service process using the Internet or mobile applications.

* Ustawa z dnia 13 czerwca 2013 r. o zmianie ustaw regulujących wykonywanie niektórych zawodów.

Source: own elaboration.

There is significant impact of the determinants described in table 3 on developing fitness market in Poland. The described phenomena already occur, however, with varying degrees of intensity in different parts of the countries, regions, cities (Cieślikowski, Brusokas, 2017). It seems that dynamics of change is especially high in capital of province as well as in those regions where significant public investments have been made in the development of sports infrastructure, including multifunctional sports facilities. There were built huge venues with inside halls, rooms for new fitness clubs too.

Conclusions

The fitness market in Poland will continue to grow. This is due to many factors, political, legal, economic, financial, social as well as technical and technological. The determinants depend on megatrends in the world (Megatrends, 2015) and depend on the economic and social changes of many areas of life in Poland.

The fitness services market will become more professional and better organized. On the market can be identified in the nearest future many new technologies related with internet technologies and new fitness tools (i.e. real things). There will be more and more companies operated on the institutional clients service process. The companies have so far carried out an institutional client in other markets. However, they will now also be trying to offer fitness services (e.g. Medicover, Luxmed, Polmed). And employers for employee retention will be extending social care including the offer of fitness services with increasingly interesting programs. Developing polish economy caused the capital surplus of some companies is still increase, and to have benefits from tax related with investments will be support the growing number of new fitness clubs in Poland. There will also be a faster development of fitness clubs chains due to increased sales activity of franchise solution providers. Such trends on the supply side of fitness market will be together to the development of demand side caused by the

increasing healthy living and well organized (under control of professionals and well-prepared equipment, in the rooms dedicated for this purpose) physical activity.

References

Cieślikowski, K., Brusokas, A. (2017). Determinants of effective management in the sport with the use of large sport arenas in selected cities. *European Journal of Service Management*, *1* (21), 5–10.

European Health & Fitness Market Report (2017). Warszawa: Delloite.

Fonfara, K. (2014). *Marketing partnerski na rynku przedsiębiorstw.* Warszawa: Polskie Wydawnictwo Ekonomiczne.

Gardawski, J., Gilejko, L., Siewierski, J., Towalski, R. (2008). *Socjologia gospodarki.* Warszawa: Wydawnictwo Diffin.

Kantyka, J., Maciąg, J. (2013). Aktywność innowacyjna mikro i małych przedsiębiorstw sportowo-rekreacyjnych na przykładzie fitness klubów – wyniki badań. *Handel Wewnętrzny*, *2*, *9* (10), 136–148.

Kotler, P. (1994). *Marketing. Analiza, planowanie, wdrażanie i kontrola.* Warszawa: Wydawnictwo Gebethner i S-ka.

Megatrends 2015. Making sense of a world in motion (2015). EYGM Limited. Retrieved from: http://www.ey.com (18.06.2017).

Niestrój, R. (2002). *Zarządzanie marketingiem. Aspekty strategiczne.* Warszawa: Wydawnictwo Naukowe PWN.

Panfil, R. (2016). *Usługi rekreacyjne – kreowanie i udostępnianie.* Wrocław: Akademia Wychowania Fizycznego.

Pestka, P. (2015). Zarządzanie czasem wolnym a zachowania polskich konsumentów na rynku fitness – case study. *Research Journal the Wroclaw School of Banking*, *6* (15), 846–852.

Pine, B.J., Gilmore, J.H. (1999). *The Experience Economy: Work Is Theater & Every Business a Stage.* Harvard Business School Press.

Raport z badań (2013). *Aktywność sportowa Polaków.* Warszawa: CBOS.

Raport (2015). *Sportowa dekada. MultiSport zmienia przyzwyczajenia Polaków. Rynek świadczeń pozapłacowych oraz branżę fitness.* Warszawa: Benefit Systems SA.

Sznajder, A. (2015). *Marketing sportowy.* Warszawa: Polskie Wydawnictwo Ekonomiczne.

Ustawa z dnia 13 czerwca 2013 r. o zmianie ustaw regulujących wykonywanie niektórych zawodów. Retrieved from: www.infor.pl (5.05.2017).

Wrzosek, W. (2002). *Funkcjonowanie rynku.* Warszawa: PWE.

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SERVICES OF OPEN INNOVATION CREATION BY USERS OF CROWDSOURCING PLATFORMS

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Abstract

Innovation becomes a driving force of contemporary companies' competitiveness. Companies evaluate from close innovations towards open and networked innovations. They use innovative potential of their outside partners, consumers within outside networks, also developed on the Internet's crowdsourcing platforms.
The purpose of this paper is to present providing services by the crowdsourcing platform users, that is the crowd members, the managers and the innovative companies during their mutual cooperation in execution of open innovation process activities on the Internet.
The paper also presents examples of services which are offered by users of each analyzed kind during their cooperation in accomplishment of open innovation process activities on existing crowdsourcing platforms in the economic practice.

Introduction

Evolution from closed to open innovation is connected with development of interorganizational networks and creation new values, knowledge, innovations by collaborators of these networks, also by the Internet's community (the crowd) during execution of open innovation process activities on crowdsourcing platforms.

The goal of the crowdsourcing platform is to engage active members (co-creators) of the crowd as prosumers (producers and actual or potential consumers) that have both the willingness, capacity and ability in solving problems and creating open innovations also new products for innovative companies. Services of IT-based crowdsourcing are offered by an organization that directly manages solving problems, creating value, and developing open innovations for innovative company(-ies) by the crowd members on the Internet. The manager of the platform participates in mutual interaction, communication with members of the crowd and the innovative company experts, and cooperate with them in collective provision of services in accomplishment of open innovation process activities on crowdsourcing platforms.

The purpose of this paper is to present providing services by the crowdsourcing platform users, that is the crowd members, the managers and the innovative companies during their mutual cooperation in execution of open innovation process activities on the Internet.

The paper determines an idea of open, networked innovation process, characterizes principles of using crowdsourcing and the role of the crowd in creating innovations for innovative companies on the Internet. It determines and describes services which are provided by the crowd members, the managers and the innovative companies during their mutual cooperation in execution of open innovation process activities. Examples of collective providing these services by the analyzed kinds of collaborators are presented for the existing crowdsourcing platforms in the economic practice.

Creation of open innovations on the Internet

Contemporary companies no longer innovate in isolation but through a complex set of mutual interactions and knowledge based relationships (mutual collaboration) with external partners, suppliers and consumers of knowledge, innovative solutions, and also creative members of open (web-based) innovation platforms (OIPs) – networks on the Internet. Innovation network is an organization with flexible structure and its partners are intensively collaborating among themselves during mutual information exchange, knowledge management and learning in open innovation processes (Dolińska, 2015, 2016).

Companies have increasingly shifted from innovation initiatives that are centered on internal resources of knowledge (closed innovation) to those are centered on external networks – said another way, a shift from firm-centric innovation to network-centric and open innovation (Nambisan, Sawhney, 2011, p. 40). Open innovation characterizes organizational framework aimed at purposive inflows of external knowledge and ideas to accelerate internal innovation (in-bound open innovation), and purposive outflows of them to support external innovation (out-bound open innovation), or both that is exchange knowledge, ideas with external collaborators (Malhotra, Majchrzak, 2014, p. 104).

OIPs, also crowdsourcing platforms can be a means for companies to accelerate the open innovation process. In such platforms, stakeholders contribute to and collaborate on designing ideas, propose new concepts and trends, present innovative solutions to win contests and to answer companies' needs (Battistella, Nonino, 2012, p. 558) and also to meet own expectations. The three forms of collaboration and participation in OIPs are: crowsourcing, common-based peer production, and open source software.

The crowdsourcing platform offers IT-enabled services provided by its collaborators in open innovation process activities, in which companies learn new values, innovative solutions (also new products) from the Internet's community. Open source software is developed collaboratively by different and independent, geographically distant

program developers. Common-based peer production refers to a new model of production performed collaboratively, where a large number of people is coordinated into large project groups without traditional hierarchical organization.

Providing services by collaborators of the crowdsourcing platform in open innovation process

The emergence of the Internet has created new opportunities to capitalize on consumer' creativity and knowledge during innovative solution, new product development by virtual consumers on crowdsourcing platforms, and their cooperation has been recognized as a promising, effective open innovation practice for companies (Füller, Matzler, Hutter, Hautz, 2012, p. 247). Today, members of the crowd on crowdsourcing platforms not only contribute ideas and input to innovation, also new product development, but they share goods, services, space, and money to deliver solutions that traditionally have been performed strictly by the companies themselves (Kohler, 2015, p. 63).

Crowdsourcing-based open innovation model consists of three elements. First, companies building their business upon the crowd need to adopt an open innovation model. Second, opening up innovation processes and knowledge resources to external creators of the Internet's community can make a significantly greater set of resources available to the company and allows it to share social networks, peer-to-peer technologies and mobile connectivity to invite users to participate in value creation activities. Third, by taking part in certain activities, the crowd members co-create value with the platform managers or by interacting with innovative companies. The platform managers facilitate interactions and information, knowledge exchanges along the entire process of open innovation (Zott, Amit, Massa, 2011; Kohler, 2015).

The manager of the crowdsourcing platform may be: 1) the innovative company that is the owner of the platform and cooperate with the crowd, or 2) the agent and the owner of the platform that organizes cooperation between the innovative companies and the crowd, and also collaborate with them during accomplishment of all or certain activities of open innovation process.

The paper tries to answer and discuss the following research question.

Can mutual cooperation of crowdsourcing users on the Internet that is the crowd members, the managers and innovative companies enable them to provide suitable services during accomplishment of open innovation process activities on the crowdsourcing platform.

Open innovation process on crowdsourcing platforms can consists of many activities and each platform and its collaborators serve one or more, or all of these activities. Members of the crowd can participate and cooperate with innovative company and the manager of the platform in providing services during collective execution of the determined and analyzed in this paper activities (that is one activity, a few, or all activities) of open innovation process: 1) presentation of expectations; 2) generation of new ideas; 3) screening design ideas; 4) innovation elaboration, testing; 5) innovation application, development; 6) innovation promotion, sale, diffusion.

Crowdsourcing collaborators on the Internet cooperate among themselves during providing relevant services in activities of the open innovation process which is executed by them collectively on the crowdsourcing platform (see |Table 1).

Services provided by the crowdsourcing platform collaborators in the economic practice

Services provided by collaborators in activities of open innovation process activities are presented as descriptive cases for the crowdsourcing platforms: InnoCentive, Mulino Bianco, LEGO Cuusoo and Amazon's Mechanical Turk.

InnoCentive firm manages the massive problem-solving and innovation-creating crowdsourcing platform. It cooperates with innovative companies and the crowd, organize and manage providing services by them on the platform. Solvers register on the InnoCentive website, read the challenge and within a specific timeframe send back the elaborated solution.

Interactions between solvers regarding a specific challenge are only possible if they formally decide to form a team of the crowd members, collaborate among themselves and share the prize. The open innovation process on this platform consists of activities: 1) a innovative company comes up with a problem for solving and dissects the problem into smaller challenges; 2) scientists across the world (the crowd) generate and submit possible, elaborated by then solutions; 3) InnoCentive evaluates the proposed solutions; 4) the managers of the platform choose the winning solutions, integrates them back as innovative elaboration and the answer to the original problem (Vuculescu, Bergenholtz, 2014).

The Mulino Bianco company produces a wide variety of bakery products. The crowdsourcing platform of this firm is developed on the basis of its virtual communication and collaboration with the Internet's community via the application of innovative marketing techniques. The Mulino Bianco crowdsourcing platform cooperates with own consumers and enables the community of them to propose new product ideas, vote for the most original ones.

Table 1. Providing services by the crowdsourcing platform collaborators in open innovation process activities

Open innovation process activities	Services provided by collaborators on the crowdsourcing platform	
	the crowd members	the manager and the innovative company
Presentation of expectations	Presenting new values, needs, expectations of customers; anticipating changes on determined markets.	Determining problems for solving, innovations for designing; engaging the crowd in anticipating evolution of markets.
Generation of new idea	Using creativity, experiences, knowledge by the crowd, generation of new design ideas, submitting them online.	Organizing contests for proposed by the crowd new design ideas; exchange, connection of knowledge, experience of the crowd and the innovative company.
Screening design ideas	Evaluating the design ideas, voting on them, discussion on proposed ideas.	Results of the crowd voting are considered as an indication of buyer interest in design ideas; choosing accurate, profitable solutions by the manager on the basis of the crowd opinions, financial and marketing analysis of new solution application by the company.
Innovation elaboration, testing	Active (co-)creating, developing innovations; testing and evaluating new solutions using proposed software.	Testing elaborated innovative solutions and connected with them requirements in collaboration with the crowd.
Innovation application, development	Opinions of the crowd provide a market test of the proposed solution, which is the best candidate for implementation.	Organizing participation of the crowd in application and/or development of the best innovative solutions; the company pays members of the crowd for profitable solutions.
Innovation promotion, sale, diffusion	Promotion of the best solution via own community, social media channels; cooperation in sale, diffusion of innovations via online, physical channels.	Involving the crowd in online promotion and/or sale of innovations; motivating members of the crowd for profitable selling of innovations (also products).

Source: own elaboration.

The platform is divided into areas connected with providing services during execution of the following open innovation process activities: 1) presentation of expectations by the company and beginning the project of new product design by creative consumers; 2) generating a new product idea; 3) screening and commenting proposed ideas by the crowd; 4) elaboration of the blog on new product assessment and its introduction to production by the company. The aim of this platform crowd is to propose, assess, collect ideas, analyze these ideas, and develop them if they are consistent with the company's mission, vision, and values. The company takes into consideration

any consumer proposal not related with its current offer. All proposed ideas are commented, evaluated by active consumers, and receive their opinions on viability on the market. The ten most voted ideas are submitted to careful analysis for feasibility by the company. If its outcome is positive, Mulino Bianco begins entering the new product into the market (Di Guardo, Castriotta, 2013).

The LEGO is Danish company of bricks and it cooperates with the manager of the Cuusoo crowdsourcing platform in Tokyo. The services provided in activities of open innovation process on the Cuusoo platform for the LEGO company are characterized for crowdsourcing collaborators: a) the crowd; b) the Cuusoo firm as the manager and the owner of the platform and c) the LEGO company (looking for innovative products on this platform). These collaborators of the platform cooperate among themselves during execution of the following activities of open innovation process (Schlagwein, Bjørn-Andersen, 2014; Lego Ideas, 2017):

1) presentation of expectations:
   - active members of the crowd on the platform with consumer-fans on social networks present new values, needs of customers, expected changes (also technological) of LEGO products,
   - the Cuusoo firm as the platform manager organizes cooperation with the crowd members, monitors the interactions with them and their discussions on proposed new solutions,
   - the LEGO company with the Cuusoo firm encourages consumer-fans to elaborating, developing innovative products;
2) new ideas generation activity:
   - creative members of the crowd usually individually generate and submit design ideas to the platform,
   - the manager of the platform enable members of the crowd to submit LEGO-related ideas and collect user ideas which might be developed into new LEGO products,
   - the LEGO experts determine which submitted ideas are the best candidates for implementation;
3) screening design idea:
   - the submitted design ideas to the platform are screened by the crowd members,
   - the manager proposes the crowd various options of evaluating, commenting, and voting on submitted design ideas on the platform,
   - the LEGO experts evaluate the presented design ideas on the base of votes, qualitative discussion of the crowd members and own opinions;
4) innovation elaboration, testing:
   - members of the crowd can use bricks, software or combination of them to prepare designs for potential new LEGO products and they take part in test for the best new product,
   - the manager provides voting as a market test before implementation of the new product design,
   - highly voted and reviewed by LEGO design idea of best new product will be produced and entered into the market;
5) innovation application, development:
   - members of the crowd upload a complete design of accepted new product to the platform,
   - uploaded a design of the best new product is transferred by the Cuusoo platform to the LEGO company and is applied by LEGO,
   - implementation of accepted new product often is conducted by the LEGO company in cooperation with external firm-partners;

6) innovation promotion, sale, diffusion:
   - the active members of the crowd usually promotes new products via the community of the platform, users' social media channels, and the owner of winning new product idea gets a financial reward (a revenue share on the sales of this product),
   - the Cuusoo firm provides communication and collaboration between the LEGO Company and the designer of winning product in its e-marketing,
   - the LEGO company lists the new product models in catalogues, involves members of the crowd in e-promotion, selling them via LEGO online and/or physical channels.

Amazon's crowdsourcing – Mechanical Turk (mTurk) is as an "artificial intelligence" web service. It performs "HITs" – human intelligence tasks, that cannot be easily duplicated or replaced by machines. This service applies real persons' intelligence and creative skills in and through the artificial environment of computing networks for solving some problems, proposing and preparing innovative solutions for the Amazon, that are difficult for machines but easy for users of the Internet elaboration (Saxton, Oh, Kishore, 2013, pp. 4–5). The Amazon's community members cooperate with the Amazon's specialists during generation of new design ideas, evaluating them and elaboration of the best innovative solutions for mTurk.

Conclusions

The conducted in this paper study confirms that mutual cooperation among the crowd members, the manager and the innovative company on the crowdsourcing platform enable them to provide relevant services during accomplishment of open innovation process activities. Future research might solve the problem how to improve relationship management with creative members of the crowd on the crowdsourcing platform because this solution influences on development and efficiency of the platform performance on the Internet.

References

Battistella, C., Nonino, F. (2012). Open innovation web-based platforms: the impact of different forms of motivation on collaboration. *Innovation: Management, Policy & Practice*, *1* (14), 557–575.

Di Guardo, M.C., Castriotta, M. (2013). The challenge and opportunities of crowdsourcing web communities: an Italian case study. *International Journal of Electronic Commerce Studies*, *1* (4), 79–92.

Dolińska, M. (2016). Otwarte procesy innowacji realizowane w sieci. *Ekonomika i Organizacja Przedsiębiorstwa*, *6* (797), 77–88.

Dolińska, M. (2015). Knowledge based development of innovative companies within the framework of innovation networks. *Innovation: Management, Policy & Practice*, *3* (17), 323–340.

Füller, J., Matzler, K., Hutter, K., Hautz, J. (2012). Consumers' creative talent: Which characteristics quality consumers for open innovation projects? An exploration of asymmetrical effects. *Creativity and Innovation Management*, *3* (22), 247–261.

Kohler, T. (2015). Crowdsourcing-Based Business Models: How to Create and Capture Value. *California Management Review*, *4* (57), 63–83.

Lego Ideas: a leading crowdsourcing platform in the Toy Industry (2017). Retrieved from: https://digit.hbs.org/submission/lego-ideas-a-leading-crowdsourcing-platform-in-the-toy-industry (10.06.2017).

Malhotra, A., Majchrzak, A. (2014). Managing crowds in innovation challenges. *California Management Review*, *4* (56), 103–123.

Nambisan, S., Sawhney, M. (2011). Orchestron processes in network-centric innovation: evidence from the field. *Academy of Management Perspectives*, August, 40–57.

Saxton, G.D., Oh, O., Kishore, R. (2013). Rules of Crowdsourcing: Models, Issues, and Systems of Control. *Information Systems Management*, *1* (30), 2–20.

Schlagwein, D., Bjørn-Andersen, N. (2014). Organizational Learning with Crowdsourcing: The Revelatory Case of LEGO. *Journal of the Association for Information Systems*, *11* (15), 754–778.

Vuculescu, O., Bergenholtz, C. (2014). How to Solve Problems with Crowds: A Computer-Based Simulation Model. *Creativity and Innovation Management*, *2* (23), 121–136.

Zott, C., Amit, R., Massa, L. (2011). The business Model: Recent Developments and Future Research. *Journal of Management*, *4* (37), 1019–1042.

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THE ROLE OF E-PARTICIPATION – CITIZEN ENGAGEMENT IN PUBLIC SERVICE DELIVERY

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Abstract

The partnership between citizen and public service sector will play an important role in good governance concept. People are able to participate in public management process and public service delivery to make societies more inclusive. Today, information and communication technologies (ICT) expanded opportunities for civic engagements. Thanks to the use of e-information provision, e-consultation and e-decision people are ably to active participation in public life. Participation praxis in public sector are expanded all over the world. The article presents an issue of using information technology for contacts between public administration and citizen in conjunction with social participation. The objective of the article is to present the concept of e-participation, methods and some practice that enable active involvement of the citizen into the public live. Next part of the article describes the global trends in e-participation development. The conclusions were formulated at the final part of the article. The paper uses the methods of literature review, case study analysis and synthesis.

Introduction

Participation apply mainly to introducing politics and making decisions In political purposes, within the limits of formal and informal systems as well. Participation exists when action taken by society can have real influence on every stage of politics lifecycle. Participation would have direct influence on public aims and values such as democracy (Millard, 2009).

Concept and levels of participation – literature overview

Concepts of participation apply to various spheres, in which most common terms are social participation, public participation and individual participation.

Social participation can be determined as a community (vertical) participation. In the broad sense it is connected with the participation of units in actions taken by society to whom belong the unit. That type of co-participation is connected with the idea of civil society whose members voluntarily take part in public activity. In wider sense, social participation means public law partnership between communal government and citizens in order to taking actions in aim of local development (Hausner, 1999). Five classical tools of social participation are: election, consultations, referendum, administrative proceeding and direct operations (Hausner, 1999).

Public participation refers to the involvement of individuals in the activities of the structures and institutions of the democratic state and so the public authorities and controlled by them or subordinate them public organizations. The concept of political society (Kaźmierczak, 2011) is the reference frame for this concept. According to Langton, public participation includes the following categories of citizen participation (Langton, 1978):

- public action,
- public involvement,
- electoral participation,
- obligatory participation.

The characteristics of individual categories of citizens' participation in the life of political communities are shown in Table 1.

Table 1. The characteristics of individual categories of citizens' participation

Category of participation	Charasteristic	Forms of participation
Public action	Measures initiated and controlled by citizens in order to influence decisions taken by public authorities or voters	– lobbying, – protest, – public education, – disobedience of citizens, – advocacy
Public involvement	Actions initiated and controlled by public authorities in the frame of their administration or management tasks. It deals with improvement activities. The decision-making process and the quality of public service delivery at every stage of public policy	– public consultation, – public consultation, – consultative and advisory boards, – public hearings, – survey research
Electoral participation	actions necessary for the nomination of candidates and the selection of representatives to hold public functions in the structures of the various levels of authority	– central elections, – local elections, – referendum
Obligatory participation	Obligatory activities taken by citizens, which are the support of the public authorities necessary to fulfill their statutory research	– obligatory payment of taxes, – institution of court judges

Source: own elaboration based on Langton (1978).

Individual participation is linked to the daily choices and actions of the individual who express his or her expectations about the society in which he or she wishes to live. It deals with issues such as socially responsible consumption, participation in charity and participation in social organizations (Kaźmierczak, 2011).

An important contribution to the theory of participation was made by Arnstein, who in 1969 defined three levels of civic participation: lack of participation, quasi participation and participation. In the first case, the opinions and interests of the decision makers are centered, but the needs of the target group are not taken into account, or the target group is deemed to have insufficient knowledge to make decisions. The stage of apparent participation means more and more influence on the decision-making process, but without the possibility of direct influence. Decision makers share problems with the target group and are interested in her views. However, opinions expressed need not be taken into account when making decisions. At the last stage of participation, the society has a formal and binding role in the decision-making process, and the partnership is characterized by this partnership (Urban, 2005).

Participation of citizens in public life should be considered both internationally and nationally as well as locally. The European Commission says that electronic participation helps people get involved in politics and understand process of making public decisions. It is part of the European Commission's „open government approach" which aims to provide opportunities for public administration (Lironi, 2016). The importance of this problem is demonstrated by the European Union's launch of the E-UROP program, whose main objective is to increase Information and knowledge on e-participation tools, especially in the field of Community policymaking. The European Union defines four basic direct tools for participation (Kinyik, 2015):

- European Citizens' Initiative,
- petition to the European Parliament,
- public consultation of the European Commission,
- puzzle by policy.

In 2001, the Organization for Economic Co-operation and Development (OECD) published a handbook that highlights the important role of local, national and international (OECD, 2001) policy-making. The OECD draws attention to the possible ways in which the rulers and citizens interact, such as:

- information (one – way relationship) – allowing access to public information;
- consultation (two-way relationship) – getting feedback from citizens as a response to the debate initiated by the rulers
- active participation (advanced two-way relationship) – citizens actively engage in decision-making and policy-making.

The role of ICTs in the process of participation

The use of ICT for the democratization of public life makes it closer to citizens. Modern ICT technologies, despite some safety constraints, are important in the development of democracy (Millard, 2006):

- they can mobilize citizens to change their attitudes from passive to active,
- can involve the public in shaping public services,
- it can help transform societal and political approach from government to people into government by people.

Electronic participation in the context of e-government plays an increasingly important role. E-participation can be defined as the process of engaging citizens in policy, decision-making, the design and delivery of services, where the ICT technology are being used (United Nations, 2016).

Electronic participation means better decision-making and increased citizen participation at all stages of the democratic decision-making process (Märker, 2009).

E-participation can be defined as the participation of natural and legal persons and their groups in public decision-making through the involvement of information and communication technologies (ICTs).

The importance of using ICT in the process of participation was emphasized by the United Nations, which, based on the OECD defined interactions, identified three levels of interoperability using electronic tools (United Nations, 2014). The characteristics of the three levels of participation are shown in Figure 1.

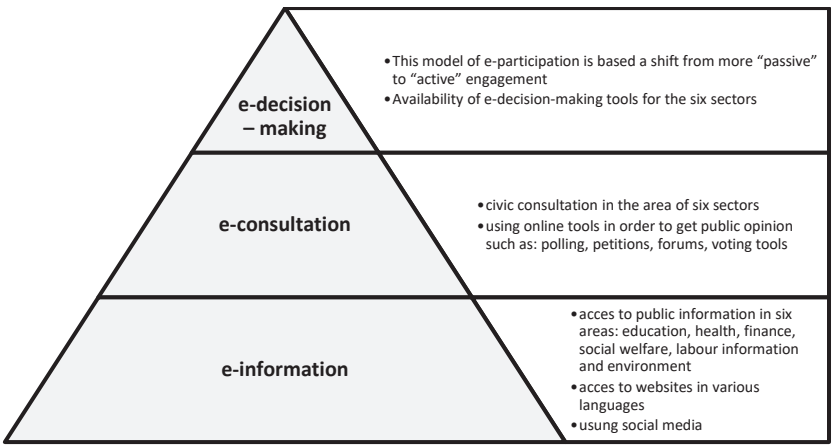

Figure 1. The characteristics of the three levels of participation

Source: own elaboration based on United Nations (2014).

Tools used in e-participation are:

- information on the websites of public institutions and non-governmental organizations,
- e-mail,
- sms,
- information in electronic media (radio, television);
- Internet chats,
- social media,
- conferences and training conducted by electronic means,
- an electronic survey on the website,
- a survey sent by e-mail,
- phone survey,
- petitions submitted electronically,
- forums,
- voting tools.

Among the tools mentioned above, electronic access to public information is the most important, which presented in a systematic way, ensuring transparency of public activities.

Examples of the best practices of e-participation in Poland- case study

One of the best practices applied at the central level of public administration in Poland is the Odysseus program introduced by the Ministry of Foreign Affairs. It allows you to contact Poles traveling abroad and give them the necessary information in case of emergencies and assistance by the competent diplomatic post. This system also allows you to receive notifications of dangers in the country of travel and other consular information (odyseusz.msz.gov.pl, 2017).

One example of participatory action at the local level using electronic tools is the NaprawmyTo.pl website. It is an IT tool for mapping problems in public spaces, which can be located in subsequent communities. The main sources of inspiration for the site were: FixMyStreet.com and SeeClickFix.com, which are very popular in the world. Thanks to this solution the inhabitants of the communes participating in this project have the opportunity to report minor defects that they observe in their own municipality. These problems include, for example, the broken windshield at the bus stop, no timetable at this stop or illegal dump. This application goes directly to the appropriate cell in the office. The citizen receives information on the progress of the case and who is involved. The program according to the 2017 data has joined 15 municipalities, which have resolved over 21,000 cases (NaprawamyTo.pl, 2017).

A solution with a wider range of possibilities for civic participation is the Platform of Social Consultations in Olsztyn (konsultacje.olsztyn.eu, 2017), which was created to keep the dialogue with residents of Olsztyn up to date and to familiarize with the planned investments. Residents now have access to information on what is being consulted, what will be consulted, what the results of the public consultation will be and how they may affect the investment decisions and urban projects. This platform includes, among others, thematic web forums or detailed city budget data. An interesting tool used in that project is the simulation game called budget slider, which allows you to easily find out the budget of Olsztyn and to get to know the influence of appropriate disposal of budget to particular municipality's tasks.

Widely used by local authorities is the electronic poll related to the civic budget. About the topic of electrical survey. The successful application of an electronic survey of mainly for the purposes of consultation in Poznan are written by Matczak, Mączka i Milewicz (2015). The universality of participatory practices with the use of electronic tools can be demonstrated by their presence not only in large cities but also in small communities. An example is the Municipality of Dobra, which has introduced and continues to develop e-participation practices such as (dobraszczecinska.pl, 2017):

- posting on the website of the municipality information related to its functioning (eg concerning investment, traffic hindrances, community budget),
- an electronic poll related to the citizens' budget,
- an electronic survey related to the program of revitalization of Dobra commune,
- SISMS messenger – a free phone application that allows you to receive important and interesting information from the Municipality of Dobra (eg, information about dangers such as storms, cultural and sporting information and more).

Global trends on the e-participation

The United Kingdom is ranked as global leader on the e-participation, while Japan and Australia share second place. In top 25 performers in e-participation in 2016 is Poland. In the survey Poland reached 14th place, while two years earlier it was 65th ahead of countries like Germany and Denmark. Studies show that public consultations, in the form of online deliberations, are a popular way of coordinating the formation of opinion among citizens for further decision-making processes by government. The United Kingdom's engagement strategy has focused on maximizing openness and transparency in information provision in general, especially in relation to policy formulation. All policy documents by the government are published on Gov.uk. Almost three thousand policy documents were already deliberated with the public's participation or are in the process of consultation. The second example is the Austrian government, which has created a directory of online consultations to inform the public of the topics that are open (United Nations, 2016).

Participatory modeling practice also applies to Estonia, which already introduced Internet voting in 2005. In 2007, the osl.ee portal was implemented in Estonia, which has the following functions (Słociński, Żelaznowski, 2015):

- the possibility of initiating new legislation, reporting criticism and ideas in the form of petitions,
- the opportunity to participate in public debate,
- possibility of obtaining public information, information on draft legislation, political decisions, planned debates.

The most common e-participation tools and activities are (Panopoulou, Tambouris and Tarabanis, 2009):

- information provision online,
- electronic campaigning (protest, lobbying, petitioning and other forms of collective action),
- e-electioneering to support politicians, political parties and lobbyists in the context of election campaigns,
- e-polling and e-voting,
- co-production and collaborative e-environments, including innovation spaces, hackathons (an event, typically lasting several days, in which a large number of people meet to engage in collaborative computer programming), crowdfunding (the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet),
- public policy discourses, including crowdsourcing, online consultation and deliberation.

The concept and tools of e-participation are still developing.

Conclusions

Participatory action is aimed at stabilizing, changing or improving some public management (Millard, 2009). The necessary conditions for effective participation are (United Nations, 2016):

- focus on areas of public activity relevant to the needs of society,
- providing appropriate tools and communication channels,
- focus on the interaction between citizens and the government itself.

In addition to the many positive aspects of involving citizens and objects interested in public decision-making, attention should also be paid to the negative side of this phenomenon. The biggest disadvantage of participation

is the longer decision-making time and costs. However, the use of ICT reduces the cost of communication and information. On the other hand, other costs are worth the cost due to the long-term benefits of cooperation between residents and authorities.

The further development of electronic participation depends on many factors including:

- willingness to use the possibility of participation by citizens, including by electronic means,
- willingness of public institutions to use participatory practices with the use of electronic tools,
- citizens' digital skills,
- access to computer, telecommunications equipment, software, telecommunications services and the Internet.

Considering the aforementioned factors, the e-participation process will develop faster in developed countries, leading in global rankings. However, the willingness to participate in the poorer countries in public life also leads to the development of e-participation processes, although they may be less technologically advanced what is proved in the United Nations reports (United Nations, 2016).

Reference

Hausner, J. (ed.) (1999). *Komunikacja i partycypacja społeczna*. Kraków: Małopolska Szkoła Administracji Publicznej Akademii Ekonomicznej w Krakowie.

Kaźmierczak, T. (2011). *Partycypacja publiczna: pojęcie, ramy teoretyczne*. In: A. Olech (ed.), *Partycypacja publiczna. O uczestnictwie obywateli w życiu wspólnoty lokalnej* (pp. 83–99). Warszawa: Instytut Spraw Publicznych. Fundacja Instytutu Spraw Publicznych.

Kinyik, M. (2015). *Guideline for E-Participation in European Union Policy-Making*. Brussels: Telecentre-Europe AISBL.

Langton, S. (ed.) (1978). *Citizen Participation in America: Esseys on the State of the Art*.

Lexington: Lexington Books (2008). In: G.P. Green, A. Haines, Asset *Building & Community Development* (pp. 13–43). The second edition. London: Sage Publication.

Lironi, E. (2016). *Potential and challenges of e-participation in the European Union*. Policy Department for Citizens' Rights and Constitutional Affairs. European Union. Retrieved from: http://www.europarl.europa.eu/supporting-analyses.

Matczak, P., Mączka, K., Milewicz, M. (2015). E-patycypacja – zastosowanie sondażu internetowego jako narzędzia partycypacyjnego. *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, *1*, 239–256.

Märker, O. (2009). Studie: E-Partizipation in Deutschland. Stärken-Schwächen-Handlungsempfehlungen . *Journal of Democracy*, *1*.

Millard, J (2006). *eGovernance and eParticipation: lessons from Europe in promoting inclusion and empowerment*. Retrieverd from: http://unpan1.un.org/intradoc /groups/public/documents/un/unpan023684.pdf.

Millard, J. (2009). *European Journal of ePractice*, *3* (7). Retrieved from: https://joinup.ec.europa.eu/sites/default/files/91/da/cc/ePractice%20Journal-Vol.7-March%202009.pdf.

OECD (2001). *Citizens as Partners: OECD Handbook on Information, Consultation and Public Participation in Policy-Making*. Paris: OECD Publishing. Retreived from: http://www.oecd.org/gov/digital-government/2536857.pdf.

Panopoulou, E., Tambouris, E., Tarabanis, K. (2009). eParticipation initiatives: How is Europe progressing? *European Journal of ePractice*, *3* (7), 15–26.

Platforma Konsultacji Społecznych Olsztyna. Retrieved from: http://www. konsultacje.olsztyn.pl.

Serwis informacyjny Urzędu Gminy Dobra. Retrieved from: http://www.dobraszczecinska.pl.

Serwis Ministerstwa Spraw Zagranicznych „Odyseusz". Retrieved from: http://www. odyseusz.msz.gov.pl.

Serwis NaprawmyTo. Retrieved from: http://www. NaprawmyTo.pl.

Słociński, B., Żelaznowski, P. (2015). E-patycypacja – uczestnictwo w epoce ICT, *Metropolitan*, *2* (4), 66–73.

United Nations (2014). *United Nations E-Government Survey 2014 E-Government for the Future We Want*. New York: United Nations.

United Nations (2016). *United Nations E-Government Survey 2016. E-Government in Support of Sustainable Development.* New York: United Nations.

Urban, U. (2005). *Demokratie Baustein „Partizipation.* BLK. Programm „Demokratie lernen & leben". Retrieved from: www.blkdemokratie.de.

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PARTICIPATION OF TENANTS AND THE QUALITY OF MANAGEMENT SERVICES OF COMMUNAL APARTMENTS

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Abstract The article is devoted to the participation of tenants in the management of communal dwellings of local self-government units. The article highlights the impact of this participation on the quality of management of municipal housing. The share of tenants in management was presented on the basis of solutions adopted by the manager of the housing stock of the Municipality of the City of Częstochowa – ZGM TBS Sp. z o.o. with regard to recovery procedures. The results of the study carried out by this Company in terms of that procedure are also discussed herein, taking into account the causes of the debt.
The article also elaborates on the issue of public tasks resting on municipalities together with an indication of the legal acts on the basis of which these tasks were imposed on municipalities. The forms in which the implementation of public tasks is acceptable, and in particular tasks of satisfying the housing needs of the local community, are also presented here.

Introduction

Local government units at the municipal level have been appointed in order to perform numerous tasks connected with satisfying collective needs of the local community. Due to their nature, they are referred to as „public tasks". These tasks include, among others, tasks related to the fulfillment of housing needs of that community.

The implementation of public tasks is of interest to both legal and economic sciences, including the management science (Dębski, 2006).

Satisfying the housing needs as the constitutional task of the municipality

Imposing the obligation to perform public tasks in terms of meeting the housing needs on units of local self-government already took place in the regulation of the Constitution of the Republic of Poland of 2 April 1997. According to art. 16 (2) of the Basic Law, territorial self-government participates in the exercise of public authority, whereas a substantial part of public tasks that are entitled under the law is performed by the local government on its own behalf and at its own responsibility. From the aforementioned constitutional standard there is a simultaneous commitment to the ordinary legislator to give, in the form of laws, an important part of public tasks to the local government in order to implement them (Skoczylas, Piątek, 2016). As a consequence, a precise assignment of tasks to be performed by municipalities, including those in the discussed scope, was done by means of ordinary laws. As far as the Constitution is concerned, one cannot also omit art. 75 according.

The largest number of public tasks was handed over to municipalities under the Law of 8 March 1990 on the commune self-government. According to art. 6 (1) of this act, all public affairs of local importance, not reserved by law to other entities, fall within the municipality's scope of activity. However, only a sample catalog of these issues was indicated in art. 7 of the Law. Among other things, matters related to the municipal housing construction were distinguished among them.

Another legal act which determines the tasks of municipalities in meeting the housing needs is the Law of 21 June 2001 on the protection of the rights of tenants, municipal housing stock and on amending the Civil Code. According to art. 4 of this law, own tasks of the municipality include the creation of conditions to meet the housing needs of the local community. The municipality, under the rules and in cases provided for in the Law, provides social and substitute housings, but also meets the housing needs of households with low income (Gilowska, 1998; O'Sulivan, Gibb, 2003). The municipality performs these tasks by means of using the municipal housing stock or in some other way (Nowak, Ulfik, 2014). This stock should be understood as premises owned by the municipality, municipal legal persons or commercial companies established with the share of the municipality, except for social housing associations, as well as premises which remain in autonomous possession of these entities. The municipality is entitled to carry out any factual and legal activities which will lead to the acquisition of ownership or spontaneous possession of premises (Doliwa, 2015).

Having owned the housing stock, municipalities are obliged to take appropriate measures which aim at the proper management of that stock. Village mayor, mayor and mayor of the city are competent in this respect. Management, bearing in mind art. 25 (2) in relation to art. 23 (1) of the Act of 21 August 1997 on real estate management, includes among other things activities indicated in the following diagram.

The management of real estate, including residential real estate, covers a very wide range of activities, and particularly independent decisions about the use and purpose of the real estate (Nalepka, 2008; Brzozowska, Starostka-Patyk, 2010).

The concept of real estate management is a term which covers a narrower range of activities. This range may be found in art. 184b, in force since 1 September 2017, of the aforementioned Law on the management of real estate. It covers the steps outlined in Figure 2.

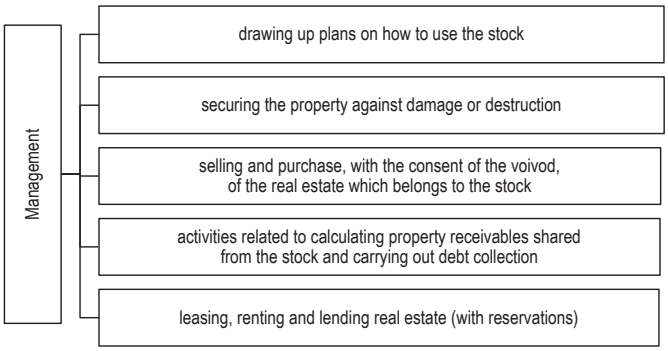

Figure 1. Activities which fall within the scope of management

Source: own elaboration.

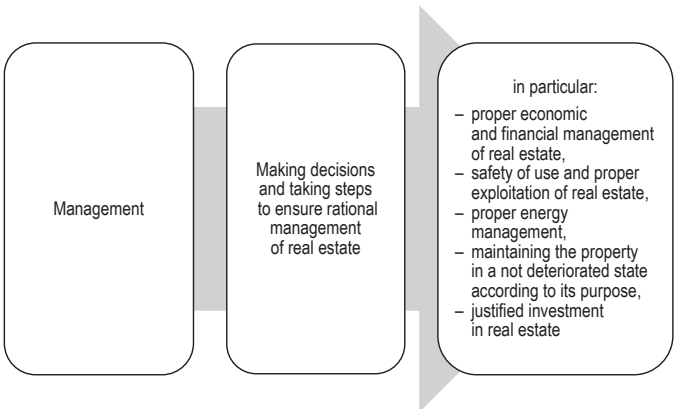

Figure 2. Activities that fall within the scope of management

Source: own elaboration.

However, a detailed scope of activities as well as the powers and duties of the administrator should be defined in each management contract.

Three models can be distinguished in terms of the manner of managing the municipal housing stock.

The direct model predicts that management activities are carried out by the municipal authorities and by the employees of the municipal office. These entities are responsible for decision-making, organization and also the executive function. In the second (indirect) management model, the municipality performs the task in question via its organizational units – budgetary plants, budgetary units, auxiliary properties. Moreover, the task can be implemented through municipal legal persons, and particularly limited liability companies and joint stock companies. In this model, the municipal authorities formulate management strategies as well as the tools to implement them. On the other hand, the aforementioned municipal entities are responsible for organization and implementation of the management process. The last management model includes entrusting the management to other economic entities

based on the management contract. This model is the so-called management in the custom system (Nalepka, 2008).

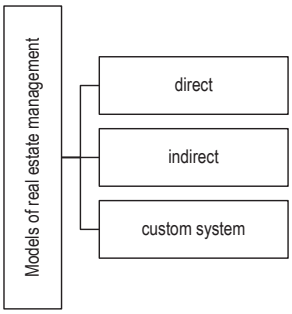

Figure 3. Models of real estate management

Source: own studay based on: Nalepka (2008).

The admissibility of municipalities to choose one of the above-mentioned models of management results directly from the legislation in force. It follows from art. 9 (1) of the Law on municipal self-government that the municipality can create organizational units and conclude agreements with other entities in order to perform its tasks (…). In turn, according to the Law of 20 December 1996 on communal economy, municipal economy may be run by local self-government entities particularly in the form of self-government budgetary plant or commercial law companies (art. 2). By contrast, according to art. 3 of this law, local government units may, by contract, delegate the performance of communal economy tasks to natural persons, legal persons or organizational units without legal personality among other things in accordance with the procedure specified in the Law of 29 January 2004 – Public Procurement Law. What is more, the grounds for entrusting the discussed activities to private entities may be sought in the law on real estate management.

Undoubtedly, each of the presented management models has specific advantages and disadvantages. It seems to be a good solution to choose the indirect model where management takes place through a municipal company. This entity is a separate from the municipality legal person which has among others an ability to self-incur liabilities (Gonet, 2008).

Participation of tenants in shaping the quality of municipal resource management services

As seen from the above, the management of communal apartments is limited to technical activities such as securing the premises from damage, implementation of legal requirements in the field of safety or administrative and accounting activities. This approach makes the tenants passive participants of the system, because often there is even a lack of the customer-service provider mechanism. The manager's customer is the municipality which commissions a service, whereas the tenant, due to the economic position, is condemned to live in the municipal stock. As a consequence, the „free market" mechanism, resulting in an increase in the quality of management services and the improvement of the quality of the surrounding housing tissue, buildings, green areas, playgrounds and the like, is impaired.

Taking into account the burden of maintaining the municipal stock connected with some political and economic transformations resulting from the fall of communism (Fehér, Teller, 2016) and the common trend towards the often chaotic privatization of the communal resources, the management of communal premises in Poland was historically limited to a simple model including management and debt collection activities. Such an approach resulted in the widespread trend to destroy the housing stock and the growing queues of residents to social housing, as well as the obligation to pay compensation for the failure to provide social housing in case of eviction from private premises.

Recently, municipalities have been going against the indicated trend. The actions of municipalities mainly concern the debt collection area, which is probably caused by the low efficiency of enforcement proceedings. According to the information of the National Council of Bailiffs, debt collection amounted to only 16% in 2016 (Information of the National Council of Bailiffs). Furthermore, this tendency can be caused by heavy social consequences of debt collection procedures, which may even lead to eviction into pavement and encourage the phenomenon of falling into the debt spiral, social exclusion or homelessness. Consequently, they can be connected with social pathologies.

The dominant municipal programs are:

- debt restructuring programs, which are usually based on significant one-time cancellations of rent arrears,
- so-called work for rent programs, based on creating possibilities to work off one's rent debt in the form of benefits in kind, which is often associated with the possibility to write off the debt,
- programs run by the so-called Centers for Social Integration.

It can therefore be stated that the way of providing communal services, designed to meet the housing needs of the residents, is evolving towards the indirect model. It involves incorporating at least the weakest economic group of tenants into the process of generating revenue from the municipal stock. This inevitably establishes communication with the management entity (Cairncross, Clapham, Goodlad, 1997; Simmons, Birchall, 2007). In case of programs involving work for rent, the tenants are included in the process of resource management, as they work on cleaning, minor renovations, caring for safety, office work.

However, the observed activities of municipalities are at the beginning of the scale of including tenants into the process of improving the quality of resource management services. There are no examples of extensive indirect models among the municipalities. There are also no examples of the implementation of tenant participation model within the process of communal management, although literature points out its advantages. These include for example:

- mobilizing tenants to care for the resources, which they start to perceive as the common good (Chapman, Kirk, 2001),
- common understanding of resource management rules, thereby an increase in the acceptance of the tenants' obligations e.g. related to rent payment,
- improving the functionality and attractiveness of the housing tissue as a common space to live (Bengtsson, 1995),
- creating social bonds between tenants, and at the same time counteracting unfavorable phenomena related to social exclusion (Jadach-Sepioło, Jarczewski, 2015; Carroll, 1999).

Including tenants in the process of municipal resource management on the example of the Municipality of Częstochowa

The management of the municipal housing stock in the Municipality of Częstochowa is carried out by a limited liability company that is owned by the Municipality – the Department of Housing Management Social Housing Association in Częstochowa LLC (hereafter: ZGM, Company). As part of its activity, the Company also performs a function related to the provision of municipal management services. In terms of debt collection activities, the Company has faced a problem of negative attitudes of tenants regarding the fulfillment of rent obligations or problems with the execution of evictions (lack of social housing). Finally, ZGM came into contact with the debtors who are affected by the so-called debt spiral – people whose execution does not even cover the interest and the costs of the process.

In response to these issues, the Company has implemented a number of programs aimed at restructuring the tenants' debts, such as:

- „work for rent" program,
- debt recovery (i.e. working it off) program as part of the Center for Social Integration,
- program of voluntary housing exchange,
- possibility of spreading the debt into installments and redemption of part of the debt in the scope of side benefits.

Moreover, the Company undertakes a series of initiatives in order to reinforce positive attitudes of the residents towards the payment of rent fees. Among them are the annual editions of the „Reliable Tenant" competition or Neighbor Days. ZGM also undertakes actions to simplify the „procedure" of rent payment.

Due to the observed effects, it was decided to carry out a study of attitudes and behaviors of the debtors against whom debt collection procedures were initiated, concerning the payment of fees for the premises and the security within the housing stock. The study was conducted in November 2016 in the form of a questionnaire survey. 299 subjects were surveyed, which fulfills the requirements of the sample representativeness.

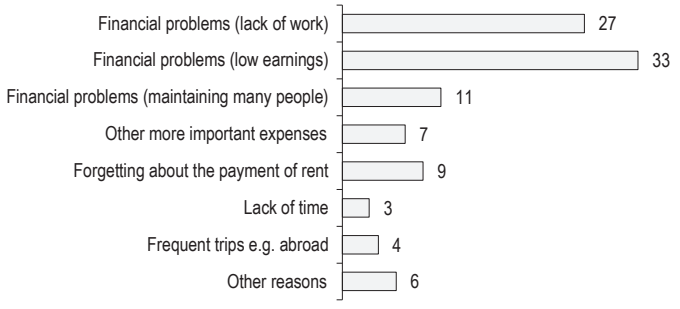

Figure 4. Main reasons for not paying rent

Source: own study based on studies commissioned by ZGM TBS Sp. z o.o. in Częstochowa.

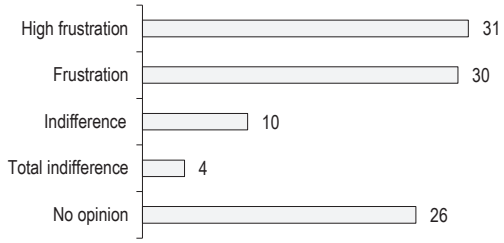

Figure 5. Tenants' feeling on initiating the debt collection procedure

Source: own study based on studies commissioned by ZGM TBS Sp. z o.o. in Częstochowa.

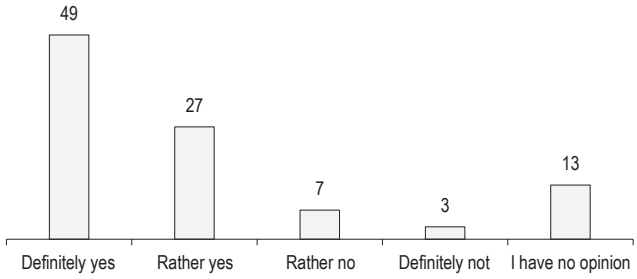

Figure 6. Concerns about the consequences of initiating debt collection procedures

Source: own study based on studies commissioned by ZGM TBS Sp. z o.o. in Częstochowa.

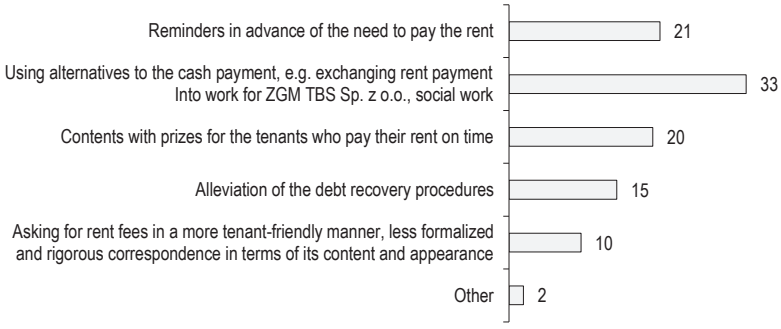

Figure 7. Incentives for the tenants to pay the rent

Source: own study based on studies commissioned by ZGM TBS Sp. z o.o. in Częstochowa.

The study confirms that rent arrears are a result of financial problems and reaffirms the intuitive conviction that fees for apartment are no longer paid in case of the objective inability to pay them – financial problems resulting from unemployment, low income and a great number of children belonged to the group of 71% of debtors. The survey,

however, has shown that there is room to improve information policy as 16% of the subjects were overdue for rent due to forgetfulness or, for instance, going abroad. The study has confirmed that the implementation of debt collection procedures causes discomfort in the residents – 61% of the debtors referred to it. However, it is worth noting that a group of nearly 40% respondents do not react to the threat of court debt collection. Bearing in mind the low efficiency of bailiff enforcement, other forms of debt collection should be dedicated to convincing these debtors to pay rent fees at least at the level of one's will.

In the course of the study, it was found that the debtors were aware of the debt relief programs implemented by the Company and considered them useful in increasing the effectiveness of debt collection. Nearly 33% of the subjects found it important to implement programs of working off the debts and to negotiate repayments (in the form of spreading them into installments and partial amortization). Significantly, almost 21% of the subjects pointed out the importance of information policy – adequate information about debts.

Conclusions

Analysis of the case of the Municipality of Częstochowa allows to put forward the thesis about the appropriateness of including tenants in the process of managing premises. The debt collection area itself allows to state that some of the problems with paying debts are solved by the properly suited information policy as well as the possibility to participate in debt relief programs. It should also be noted that the provider of the management service supports the management of the tenants' budgets by means of avoiding the most serious financial problems connected with the so-called debt spiral.

Conclusions regarding the inclusion of tenants in debt collection procedures of the administrator can certainly be extended to other management issues. Therefore, it can be concluded that the participation of tenants in the management of communal apartments is a tool of great potential, allowing to increase the quality of the management services, to improve the quality of life in common space and to counteract negative phenomena resulting from social exclusion.

References

Bengtsson, B. (1995). *Housing – Market Commodity of the Welfare State, materials of the Institute of Housing Research.* Gävle.

Brzozowska, A., Starostka-Patyk, M. (2010). Determinants of Outsourcing Process. *Freiberger Forschungshefte. D 238 Wirtschaftswissenschaften*, 3–17.

Cairncross, L., Clapham, D., Goodlad, R. (1997). *Housing Management, Consumers and Citizens, Routledge*. New York.

Carroll, A.B. (1999). Corporate Social Responsibility: Evolution of a Definitional Construct. *Business and Society*, *3* (38), 268–295.

Chapman, M., Kirk, K. (2001). *Lessons for Community Capacity Building: A Summary of Research Evidence, Scottish Homes.* Edinburgh.

Fehér, B., Teller, N. (2016). An Emerging Research Strand: Housing Exclusion in Central and South East Europe. *European Journal of Homelessness*, *3* (10), 67–85.

Gilowska, Z. (1998). *System ekonomiczny samorządu terytorialnego w Polsce*. Warszawa.

Gonet, W. (2008). Uwagi o formach prowadzenia gospodarki komunalnej. *Samorząd Terytorialny*, *7–8*, 72.

Information of the National Council of Bailiffs (2017). Retrived from: www.rp.pl (18.07.2017).

Jadach-Sepioło, A., Jarczewski, W. (2015). Housing Policy as a Part of Urban Regeneration Policy – The Case of Poland. *Journal of Business and Economics*, *2* (6), 381–392.

Nalepka, A. (2008). System zarządzania zasobem nieruchomości gminy. *Zarządzanie nieruchomościami*, *64*, 5–9.

Nowak, S., Ulfik, A. (2014). An evaluation of regional development in the context of economic and environmental benefit. *Polish Journal of Management Studies*, *1* (10), 74–83.

O'Sulivan, T., Gibb, K. (2003). *Housing Economics and Public Policy.* Blackwell Science.

Simmons, R., Birchall, J. (2007). Tenant Participation and Social Housing in the UK: Applying a Theoretical Model. Housing Studies, *4* (22), 573–595.

Skoczylas, A., Piątek, W. (2016). In: M. Safjan, L. Bosek (eds.), *Konstytucja RP. Tom I. Komentarz art. 1-86.* Legalis.

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DIMENSIONS OF CO-PRODUCTION OF EDUCATION SERVICE

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Keywords value, co-production, higher education, students, loyalty, image

Abstract

The paper deals with the issue of value co-production in higher education and it consists of three parts. In the first part the literature review on conceptualization and the role of joint production of value is presented leading to the proposal of 7-dimensional concept of value co-production in educational services. In the second part of the paper, the results of a quantitative study conducted on a sample of over 1,000 business students from three leading Polish universities are discussed. The analysis of the results allows for the confirmation of the 7 dimensions of value co-production (dialogue, control, access to information, intellectual and behavioral involvement, knowledge sharing and knowledge intake), as well as their positive relationship with students' loyalty towards the university and the perception of the university image. In the final part of the paper, some practical implications are offered and the limitations of the study are addressed.

Introduction

Every organization seeks opportunities to build strong market position and achieve their goals in the best possible way, which sometimes implies high sales and profits but occasionally it refers to more intangible objectives such as creation of knowledge and the development of the society. This is also true for the higher education sector, where many institutions are forced to re-evaluate their strategies and adapt their activities in order to face the

present and upcoming challenges (Diaz-Mendez, Gummeson, 2012; Judson, Taylor, 2014). This paper discusses the phenomenon of value co-production, examines its application in the higher education sector and attempts to verify some theoretical assumptions via empirical research (survey).

Literature review

Value has been in the center of researchers' attention for more than four decades, however, there is lack of consensus in terms of its meaning and definition (Sanchez-Fernandez, Iniesta-Bonillo, 2006). Various proposals presented in the literature range from price/cost approach to the phenomenological understanding of the concept addressing the economic and psychological aspects of value creation (Gallarza, Gil-Saura, Holbrook, 2011). In this paper value is conceptualized as a benefit for an actor, which emerges from a preferential, interactive and subjective experience (Holbrook, 1999) resulting from the comparison of all benefits and all sacrifices incurred by an actor. Similarly to the definition of value, there are also debates as to the process in which value is created. With the development of the service-dominant logic (Vargo, Lusch, 2004; Vargo, Lusch, 2008), the initial value-in-exchange approach has been replaced by value-in-use and value-in-context putting value creation in ever wider context of a service ecosystem with numerous participants involved (Vargo, Lusch, Akaka, 2010).

One thing is clear, though – value is subjective and always determined by the beneficiary, thus some form of customer participation in this process is necessary (Prahalad, Ramaswamy, 2004). The concept of customer participation covers a variety of behaviors, such as value co-creation, co-production, prosumption and open innovation (Leclercq, Hammedi, Poncin, 2016). This paper focuses on value co-production which is a sub-process of value co-creation (Vargo, Lusch, 2004; Xia, Fan, 2008). Co-production (joint production) of value is not an entirely new concept and it has been discussed in the literature for the last four decades. It is understood as a direct or indirect cooperation with the customers (Hu, McLoughlin, 2012) or their participation in the design and production of a product or service (Etgar, 2008), where the company has the dominant position and defines the scope of customer activity. The involvement of the customer in company's processes is proven to bring various benefits (Bendapudi, Leone, 2003), such as increased effectiveness (Fitzsimmons, 1985), perceived quality (Dablokhar, 1990) and greater responsibility of the customer for the process and its results (Van Raaji, Pruyn, 1998). It also allows the company to diversify its market offer (Song, Adams, 1993) and changes the perception of the offer from product to process (Firat, Dholakia, Venkatesh, 1995). An interesting conceptualization of value co-production is proposed by Ranjan and Read (2016), who claim that it is an essential component of value co-creation and it consists of three dimensions:

- knowledge and information sharing and exchange,
- equity (transparency and power sharing, company's willingness to give customer some control over the process),
- interactions occurring via dialogue and customer involvement in the process of value creation.

This proposal was adapted to the higher education sector, where students are the actors in the role of a customer – their involvement in the educational service process is desirable and necessary, and to some extent predefined by the university, which is officially in charge of the education programs and processes. This approach seems of particular importance in the Polish context, where higher education institutions are exposed to increased competition, unfavorable demographic trends and social perceptions, as well as are subject of fierce criticism and

significant changes (Dziewanowska, 2014; Kwiek, 2015). Understanding students' perceptions of the educational service can be instrumental in planning of the university activities.

Research method

The purpose of this study was to investigate the dimensions of value co-production concept in the education service and to investigate the relationship between the dimensions of value co-production and students' loyalty and their perception of the university's image. Based on the literature review it is assumed that value co-production consists of three major dimensions: knowledge, equity and interactions (Ranjan, Read, 2016, p. 303).

The following hypotheses were stated:

- H1. Value co-production is a multidimensional phenomenon.
- H2. There are differences in all dimensions of value co-production among students representing the three institutions.
- H3. There is a positive relationship between dimensions of value co-production and students' loyalty.
- H4. There is a positive relationship between dimensions of value co-production and the perception of the university image.

The research method used in the study was a survey (PAPI) and the research tool was a questionnaire consisting of two parts. Part one comprises statements referring to value co-production (with a 5-point Likert scale anchored at 5 – strongly agree, 1 – strongly disagree) and part two refers to sample characteristics. The questionnaire was distributed among students from faculties of management at three Polish universities and a quota sampling technique was used. Table 1 presents detailed characteristics of the sample.

Table 1. Sample characteristics

	University of Warsaw (UW)	University of Economics in Katowice (UEK)	Poznań University of Economics and Business (UEP)
Total	350	353	324
Female	234	253	191
Male	116	100	133
1st BA	70	82	58
2nd BA	78	82	60
3rd BA	66	62	58
1st MA	75	65	86
2nd MA	61	62	62

Source: own study, N = 1027.

Results of the study

In order to verify the first hypothesis (H1) the factor analysis was conducted using principal component analysis with a Varimax rotation (with Kaizer normalization). The KMO measure of sampling adequacy was 0.890, the Bartlett's test of sphericity was significant and the factors explained 62.5% of the variance. Table 2 presents the statements grouped into 7 factors: 1) dialogue, 2) access to information, 3) behavioral involvement, 4) control, 5) intellectual involvement, 6) knowledge sharing, 7) knowledge intake. The Cronbach's alpha coefficients exceed

0.76 for all factors except knowledge intake (0.663), which is acceptable for newly created scales (Nunnally, Bernstein, 1994).

Table 2. Service co-production dimensions – component matrix

Statement/Factor	1	2	3	4	5	6	7
I think my faculty takes me seriously	0.760						
I think my faculty takes active steps to satisfy my needs	0.750						
I have a feeling that my faculty makes decisions and acts in my best interest	0.733						
I know I will be listened to when needed	0.731						
It seems to me that my faculty understands my needs	0.705						
I have an impression that my opinion doesn't matter to my faculty	0.584						
I can easily express some suggestions	0.549						
I feel well-informed		0.853					
I can easily get to important information		0.831					
I have negative opinion about the access to information at my faculty		0.828					
My faculty uses proper communication channels		0.827					
I reckon the information flow at my faculty is satisfactory		0.794					
I am involved in additional activities at my faculty (apart from studying)			0.844				
I am a member of an academic/student association			0.767				
I participate in workshops organized at my faculty			0.734				
I participate in social events organized by my faculty			0.728				
I participate in conferences organized at my faculty			0.715				
I have a feeling I make a substantial contribution to my faculty			0.655				
I know that effects of my studying depend on me				0.739			
I usually decide on my own what's best for me in terms f studying				0.727			
I feel that in terms of studying I am in charge of my destiny				0.725			
While studying, I feel that I can take actions that will benefit me				0.693			
I have control over the course of my studies				0.675			
I try to prepare for the classes					0.766		
I devote more time to studying than other people					0.764		
I put minimal effort into studying					0.731		
I am involved in my studies					0.721		
I gladly talk about my experiences with other students						0.837	
I readily share my knowledge						0.803	
I gladly discuss my experiences during classes						0.778	
In my opinion other people are the best source of knowledge							0.777
I often learn from others							0.738
I think other students are a poor source of knowledge							0.719
Cronbach's Alpha	0.861	0.922	0.852	0.809	0.768	0.772	0.663

Source: own study, N = 1027.

The 7 identified factors match the three theoretical dimensions proposed by Ranjan and Read (2016) as factors 7 and 6 (knowledge sharing and knowledge intake) constitute the knowledge dimension, factors 4 and 2 (control and access to information) constitute the equity dimension, and factors 1, 3 and 5 (dialogue, intellectual and behavioral involvement) constitute the interactions dimension. Thus, the H1 is supported.

In order to verify the second hypothesis (regarding the differences in all dimensions of value co-production among students representing the three institutions), Kruskal-Wallis nonparametric test was used and the results are presented in Table 3. It can be observed that the results are significant for all dimensions except dialogue (1) and control (4), thus H2 is partially supported.

Table 3. Kruskal-Wallis test: value co-production dimensions at universities

	Dialogue	Access to information	Behavioral involvement	Control	Intellectual involvement	Knowledge sharing	Knowledge intake
Chi-Square	0.164	15.449	10.829	0.779	26.378	15.759	10.287
df	2	2	2	2	2	2	2
Asymp. sig.	0.921	**0.000**	**0.004**	0.677	**0.000**	**0.000**	**0.006**

Source: own study, N = 1027.

A further look at the means for each dimension reveal that students declare a rather high level of control over their course of study (3.78), as well as knowledge sharing (3.70) and intake (3.71), while the dialogue (3.04) and access to information (3.18) dimensions are perceived as neither high nor low. It is interesting (and perhaps worrisome from the university perspective) that the behavioral involvement (2.20) is definitely low and intellectual involvement is average (3.23). The UW students declared the highest levels of involvement (3.42 for the behavioral and 2.34 for the intellectual involvement) and knowledge sharing (3.83) and intake (3.81), while UEK students expressed the highest assessment of access to information (3.30).

Table 4. Means for universities and co-production dimensions

University		Dialogue	Access to information	Behavioral involvement	Control	Intellectual involvement	Knowledge sharing	Knowledge intake
UW N = 350	mean	3.049	3.187	**2.342**	3.786	**3.423**	3.827	3.814
	std. dev.	0.723	0.911	0.940	0.687	0.753	0.629	0.650
UEK N = 353	mean	3.032	**3.302**	2.109	3.801	3.244	3.654	3.636
	std. dev.	0.669	0.853	0.820	0.624	0.675	0.730	0.702
UEP N = 324	mean	3.052	3.030	2.153	3.743	3.117	3.617	3.687
	std. dev.	0.672	0.923	0.844	0.696	0.786	0.743	0.698
Total N = 1027	mean	3.044	3.177	2.203	3.778	3.265	3.701	3.713
	std. dev.	0.688	0.901	0.875	0.669	0.748	0.707	0.687

Source: own study, N = 1027.

The verification of hypotheses 3 and 4 (regarding the relationship between dimensions of value co-production, students' loyalty and the university image) was conducted with the correlation analysis. The scales for students loyalty and the university image were developed and tested by Dziewanowska (2016). The mean score for the university image was 3.18 (with no statistically significant differences among universities), while the mean for students loyalty was 3.55 (the highest for UW – 3.71, and the lowest for UEK – 3.40). The correlation is significant for both students' loyalty and the university image and all dimensions of value co-production, and its strength varies between weak and moderate. The strongest relationship can be observed for dialogue and control dimensions for

both loyalty (0.469 and 0.343 respectively) and image (0.478 and 0.338 respectively), and behavioral involvement for loyalty only (0.354). Thus, hypotheses 3 and 4 are fully supported.

Table 5. Spearman's rho correlation coefficient for co-production dimensions, students' loyalty and the university image

		Dialogue	Access to information	Behavioral involvement	Control	Intellectual involvement	Knowledge sharing	Knowledge intake
Loyalty	correlation coefficient	**0.469**	0.311	**0.354**	**0.343**	0.307	0.230	0.226
	sig.	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Image	correlation coefficient	**0.478**	0.295	0.172	**0.338**	0.219	0.177	0.261
	sig.	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Correlation is significant at the 0.01 level (2-tailed).

Source: own study, N = 1027.

Conclusions

The results of the study confirm the multidimensionality and complexity of the value co-production concept in educational services, as well as their relationship with students' loyalty and the university image. A closer look at the results allows also for some practical implications.

First of all, it is clear that students feel they are in control of their course of study and willingly engage in knowledge sharing with others. At the same time, it can be observed that their behavioral involvement (actual participation in activities offered by the university) is rather low, while their assessment of other dimensions is moderate. These results are of consequence for students' loyalty and the perception of the university image. As the correlation analysis shows, the relationship between the dialogue dimensions and students' loyalty and university image is the strongest, thus more attention should be paid to understanding students' needs and acting upon that knowledge (or perhaps making them more aware of the university activities undertaken in this area). As for the control, its relationship with students loyalty and university image is moderate and this dimension was assessed best by the students. However, involvement – especially the behavioral one – was declared at a low level and the same time its relationship with students' loyalty is rather high. Therefore, it seems that more effort should be put into encouraging students to physically participate in various activities organized by their universities as it can not only increase their loyalty, but also benefit them from educational perspective.

Limitations of the study

This study has three major limitations. The first one results from the sampling method used in the study and it is suggested that further research should be conducted on a randomized sample. The second limitation stems from the survey technique used in the study where only students' declarations and not actual actions are investigated. Thus, other techniques (such as observations and experiments) should be also used in further research. Finally, educational service is a very complex one with various participants within and outside of the university (e.g. lecturers, administrative staff, future employers, government) and it would be interesting to learn their perspectives on value co-production process.

References

Bendapudi, N., Leone, R.P. (2003). Psychological implications of customer participation in co-production. *Journal of Marketing*, *1* (67), 14–28.

Dablokhar, P. (1990). How to improce perceived service quality by improving customer participation. In: B. Dunlap (ed.), *Developments in Marketing Science* (pp. 483–487). Cullowhee, NC: Academy of Marketing Science.

Diaz-Mendez, M., Gummeson, E. (2012). Value co-creation and university teaching quality. *Journal of Service Management*, *4* (23), 571–592.

Dziewanowska, K. (2014). Współtworzenie wartości w edukacji wyższej w świetle badań jakościowych. *Marketing i Rynek*, *8*, 222–228.

Dziewanowska, K. (2016). Wymiary doświadczeń w usłudze edukacyjnej w szkolnictwie wyższym. *Studia i Prace WNEiZ UW*, *2* (43), 41–51.

Etgar, M. (2008). A descriptive model of the consumer co-production process. *Journal of the Academy of Marketing Science*, *1* (36), 97–108.

Firat, A.F., Dholakia, N., Venkatesh, A. (1995). Marketing in postmodern world. *European Journal of Marketing*, *1* (29), 40–56.

Fitzsimmons, J.A. (1985). Consumer participation and productivity in service operations. *Interfaces*, *3* (15), 60–67.

Gallarza, M.G., Gil-Saura, I., Holbrook, M.B. (2011). The value of value: Further excursions on the meaning and role of customer value. *Journal of Consumer Behaviour*, *10*, 179–191.

Holbrook, M.B. (1999). Introduction to consumer value. In: M.B. Holbrook (ed.), *Consumer Value. A framework for analysis and research* (pp. 1–28). London: Routledge.

Hu, Y., McLoughlin, D. (2012). Creating new market for industrial services in nascent fields. *Journal of Services Marketing*, *5* (26), 322–331.

Judson, K.M., Taylor, S.A. (2014). Moving from Marketinzation to Marketing of Higher Education: The Co-Creation of Value in Higher Education. *Higher Education Studies*, *1* (4), 51–67.

Kwiek, M. (2015). *Uniwersytet w dobie przemian*. Warszawa: Wydawnictwo Naukowe PWN.

Leclercq, T., Hammedi, W., Poncin, I. (2016). Ten years of value cocreation: An integreative review. *Recherche et Applications en Marketing*, 1–35.

Nunnally, J.C., Bernstein, I.H. (1994). *Psychometric Theory.* New York: McGraw-Hill.

Prahalad, C.K., Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *3* (18), 5–14.

Ranjan, K.R., Read, S. (2016). Value co-creation: concept and measurement. *Journal of the Academy of Marketing Science*, *3* (44), 290–315.

Sanchez-Fernandez, R., Iniesta-Bonillo, M. (2006). Consumer perception of value: literature review and a new conceptual framework. *Journal of Consumer Satisfaction*, *Dissatisfaction and Complaining Behavior*, *19*, 40–58.

Song, J.H., Adams, C.R. (1993). Differentiation through customer invovlement in production of delivery. *Journal of Consumer Marketing*, *2* (10), 4–12.

Van Raaji, W.F., Pruyn, A.T. (1998). Customer control and evaluation of service validity and reliability. *Psychology & Marketing*, *8* (15), 811–832.

Vargo, S.L., Lusch, R.F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, *1* (36), 1–10.

Vargo, S.L., Lusch, R.F., Akaka, M.A. (2010). Advancing Service Science with Service-Dominant Logic. In: P.P. Maglio, C.A. Kieliszewski, J.C. Spohrer (eds.), *Handbook of Serice Science* (pp. 133–156). Springer.

Vargo, S., Lusch, R. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, *68*, 1–17.

Xia, L., Fan, X. (2008). Who should do the work: The different roles of customer participation and its impact on satisfaction. *American Marketing Association*, 284–291.

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OPTIMIZATION OF COMMUNES' SERVICES BY NETWORK COOPERATION WITH PRIVATE COMPANIES

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Abstract The main purpose of the article is to determine possibilities and conditions of optimizing the process of providing services by communes by initiating and developing network cooperation with private companies operating in the region. At the beginning the author described the stages of the process of achieving network maturity in network cooperation. Next, the identified stages have been related to possible forms of network relations between communes and companies. As a consequence, the practical aspect of this network cooperation potential has been shown. Finally, the author answered the question to what degree the cooperation between communes and private companies operating in the region shows typical features of a network organization.

Introduction

Modern models of providing public services require flexibility and innovative approach. Communes, being the key unit of local public administration, must possess the ability to adjust to changing needs of their clients. Consequently, local authorities ought to limit exploitation of a supervisor function in favor of initiating partnership

cooperation with various organizations operating in a region, including private companies. In this way they may optimize the process of providing services by taking advantage of a synergy effect and transfer of knowledge.

In this context the concept of a network cooperation between communes and local private companies seems a considerably attractive way of creating mutual relations. The network consists of knots (organizations) and relations between them, thanks to which the added value is created. The net becomes a very specific sort of cooperation based on horizontal dependences (Mitręga, 2010; Łobos, 2000; Newman et al., 2004). Hierarchical structure is not created (Flieger, 2016), since relations do not base on subordination. Moreover, each partner joins the network freely, in the process of searching for mutual benefits (Zimniewicz, Piekarczyk, 2010). Built relations allow the exchange (flow) of knowledge, skills and material resources (Downes, 2005).

The analysis and research results presented in the paper are a part of a scientific project realized by the author (*Optyka procesowa oraz sieciowa w zarządzaniu instytucjami administracji publicznej*, project financed by Ministry of Science and Higher Education, 77/WZA/46/DzS). The following research methods have been used: analysis of documents and law acts regarding functioning of local government institutions and collaboration with private organizations, study of literature concerning the characteristics of network relations (inter-organizational network), expert interviews with representatives of both communes and private organizations. Analyzed organizations operate in Great Poland and Lower Silesia voivodships. Such a methodology allows complex verification of possibilities of communes' involvement (initiation and development) in network collaboration.

Process of achieving network relations maturity

In order to realize tasks within a network, partners must understand mutual expectations and capabilities. After a preliminary verification of information, first joint initiatives are taken up. They are supposed to check in practice possibilities of cooperation. As a result, partners make further decisions which are to strengthen the bonds. Thus, creating optimal network structure constitutes a process which includes getting through some stages leading to network maturity (Baker, 1993).

The initial stage is the moment potential partners become aware of possibilities of realizing some ventures within network. It is especially difficult in case of communes, since their structure is hierarchical, not flexible, public servants must obey formal norms and regulations. Such an idea of the way an organization operates is substantially different from the concept of network cooperation, in which flexibility and partnership (flat structures) based on trust are crucial. Such a perspective requires a totally different attitude to the way an organization ought to operate. Of course resigning from hierarchical and formal functioning of communes is not possible. However, it is vital to realize that they do not have to follow this pattern completely. There is a possibility to realize tasks also through getting involved in network relations, including private companies operating in a region. Forms of such a cooperation may be very different, adjusted to needs and expectation of partners.

The second stage of achieving network maturity begins the moment potential partners initiate first relations, organize first meetings at which they have a chance to get to know one another and, as a consequence, assess whether there exist fields of potential cooperation, if it is possible to define common goals, priorities and strategies. At this stage contacts are informal and basically are limited to exchange of information.

If the process of getting to know one another leads to conclusion that there exists a platform for cooperation, the third stage appears. Basically, it means that partners declare that they are willing to either create or join network. This moment is crucial, since an initial informal network comes to life.

The next, fourth stage of network development begins when organizations realize first common ventures. They do not generate high risk, often are limited to planning and coordinating initiatives which are supposed to increase synergy and cohesion. Still the very idea of such relations is to signal good will and building trust to one another. Partners make an attempt to define fields of possible future cooperation which will be beneficial for all.

The utter, most advanced stage of maturity in network relations is formal partnership. This level will be achieved only on condition that the experience from earlier cooperation have brought benefits and all partners trust one another. Network relations become confirmed by a formal agreement, in which fields of cooperation and responsibilities of all parties are stated. Such a formalization often constitutes a beginning of strategic partnership which allows achieving common, long-term objectives (Baker, 1993). Depicted process of achieving network maturity can be presented in a following synthetic way:

Becoming aware of network cooperation possibilities
↓
Informal relations (getting to know one another)
↓
Declaration of will to join a network
↓
First common initiatives
↓
Formal partnership

The abovementioned analysis of the process may be also depicted from a slightly different perspective of evaluation of cooperation forms (levels). The first level is characterized by defensive approach, separation, even conflicts. In a cooperation between communes and private sector organizations the source of a conflict might be e.g. fiscal policy of local administration. However, constant conflicts or competing may not be justified from a point of view of social and economic development of a region. Becoming conscious of this fact constitutes a key moment in the process of development of network relations. Joining forces and resources may bring considerably more benefits. Partners create unique added value, beneficial for all members of the network, by taking advantage of the synergy effect.

At the beginning such a cooperation is limited to coordination, bonds are rather loose, often informal. Realized ventures are low-risky, they allow better understanding of needs and mutual benefits. The relation changes with time, bonds become more tight and initiatives more complex and risky. As a result, optimal level of partnership is achieved. Depicted dependences can be shown in a following way:

Competing (conflict) > coordinating > cooperating.

Stages of network cooperation with private companies

At the very beginning of the analysis of possible forms of network cooperation between communes and private companies it is crucial to make a fundamental distinction. There are two major fields of relations between the two parties. The first one concerns creating conditions for development of entrepreneurship (supporting business activity

in a region). Such an activity of local authorities bases on supervisor-subordinate relations – a commune acts as a public institution which has a right to make and impose some decisions which have an impact on a private sector. In this case the relations have an indirect character. Therefore, from a perspective of creating network relations the second field is definitely more important. It focuses on initiating direct, partnership relations which private companies in order to realize specific tasks or projects. However, achieving coherent, partnership cooperation requires time. It constitutes a process which consists of a few general stages:

1. Informing – cooperation begins with exchange of information (in both directions). There are not any legal regulations which would state very clearly in what way the informing ought be realized, thus, it is up to both parties what channels and principles of communication they choose, depending on local needs and conditions. A platform for information exchange might be a dedicated web page or a unit in a public office. At this stage relations are still mostly informal and are supposed to get to know one another better, understand other party's objectives and expectations.
2. Consulting – it is a considerably more advanced form of cooperation. Consultation does not mean only allowing access to information regarding some projects, plans, legal acts, but also being open to express and share opinions and being ready to implement changes. At this stage informal relations become limited in favor of taking up first formal ventures. All parties create a base for joint coordination of realized tasks.
   Example. Authorities of Skawina commune (major, his deputy and the president of city council) organize systematic meetings with local entrepreneurs. They allow presenting a vision of economic development and priorities in entrepreneurship support. Lately the commune has consulted development of Business Activity Zones (*Strefy Aktywności Gospodarczej*), new grounds for investments, revitalization of a technical and road infrastructure within a former Aluminum-works, opening of Investor Centre (*Centrum Obsługi Inwestora*) and adjusting an education system to the needs of a local labor market (www.gminaskawina.pl, access: 3.01.2017).
3. Forum of cooperation – it constitutes a valuable initiative which allows formalizing and systematizing rules of cooperation. Local companies become involved in solving local social and economic problems. What is especially important, a forum is a place where representatives of three sectors (private, public and non-governmental) may meet and discuss possible forms of further cooperation. In this way a network with various organizations (knots) and relations between them are created. It ought to base on strategic documents and sectors' programs implemented by public administration. Institutional adjustment of a local public office, in which a unit coordinating cooperation with a private sector is created, constitutes a key element of the formalization. At the same time the analysis of what a commune does in the field of supporting companies and investors is carried out.
4. Joint projects – it constitutes optimal maturity in network cooperation. All parties are equal partners, they join a network with the awareness of common objectives and mutual benefits. There are various possible forms of such a cooperation, depending on a social and economic character of a region and specific needs of all partners. However, at this point it seems adequate to mention two forms which allow strengthening network relations. Firstly, it is recommended that the network consists representatives of *all* sectors operating in a region, both public, private and other, especially non-governmental. Transfer of knowledge between organizations which have different experience and objectives allows realization of complex projects, taking advantage of a synergy effect and a potential of innovative solutions. The second

form is a public-private partnership, whose main objective is to realize tasks and provide services, which are traditionally provided by a public sector, together with a partner from a private sector. The cooperation bases on an assumption that each party can realize assigned tasks more professionally and efficient than the other one. In this way partners complement one another, concentrating on activities within a project which they can do the best. Thanks to sharing tasks, responsibility and risk, a public-private partnership achieves economically optimal way of creating infrastructure and providing public services. At the same time each party gains benefits which are adequate to engagement.

Example. Major of Gostyń and one of local companies collaborate in the field of founding a so-called electric energy purchasing group. It constitutes a virtual client who buys energy for numerous partners. Joining a lot of local organizations is going to strengthen their position as a buyer, which means bigger possibilities for negotiating more beneficial conditions (www.gostyn.pl, access: 13.01.2017).

Network cooperation features

It is vital to be aware that the very fact of initiating cooperation between communes and private companies does not mean that at the same time it initiates creation of network relations. There is a need of taking up thought-out measures in order to build and develop such a cooperation. However, in case of cooperation between the two parties in question, some typical features of network relations are quite natural, other require working on. Thus, at this point the question arises: to what degree cooperation between communes and private companies shows features of a network? In this context the features ought to be divided into three groups:

A. Network cooperation features are natural for analyzed relations – they include:
- free choice regarding joining and leaving the network – both parties are able to function and achieve their goals separately, they do not depend on one another. Access and leaving the net depend only on the analysis whether being in the network is beneficial or not,
- long-term cooperation – local authorities take advantage of instruments for supporting entrepreneurship and their perspective is long-term. Their priority is stable, systematic development of a region. Therefore, planning and realizing strategic cooperation with companies operating in a region is very natural,
- limiting competition in favor of cooperation – objectives of local public administration and private companies are not in conflict, it is natural that both parties initiate cooperation in order to increase efficiency, they complement one another,
- legal and organizational autonomy.

B. Network cooperation features start to appear as the cooperation reaches more advanced stages of network relations maturity:
- awareness of common objectives – basic goals of both parties are not convergent, that is why starting cooperation requires identifying common fields. However, it is plausible only if the bonds between potential partners become more tight and when they know well and trust one another,
- open communication system – as a result partners develop a negotiating form of coordinating actions – decisions are made together by all participants of the network. However, close, direct contacts are well-developed only when partners realize projects, such a dialog does not exist on earlier stages of the process of achieving network cooperation maturity,

- access to partners' resources (synergy effect) – absolutely key resource is knowledge, which leads to innovative solutions. Transfer of knowledge appears at the most advanced stages (forum of cooperation, joint projects) – then partners learn from one another in the process of planning and realizing initiatives,
- trust – it is absolutely natural that to start trusting partners, they must have time to get to know one another. Therefore, the level of trust naturally depends on how advanced and tight the cooperation is.

C. Network cooperation features do not appear naturally:

- flexibility – at the beginning it must be clearly stated that *theoretically* this feature could be exploited freely – partners can change configuration of the network, optimally adjusting it to the needs of a particular project or a task. However, in practice this extremely valuable potential of a flexible adjustment to changing requirements and conditions is not used. Often cooperation bases on routine and repeating the same schemes. If partners do not carry out analysis of changes in the environment, new needs, chances and threats, they continue cooperation with the same organizations, they are not open for consultations, which considerably limits possibilities of reconfiguration of the network by access of new organizations,
- relations based on a process orientation – a turbulent nature of the environment requires building up natural ability to cope with challenges (Perechuda, 2000). That is why effective cooperation within a network ought to be based on process relations. Partners in a net can build relations basing on processes which are linked with one another. Such an approach strengthens horizontal, flat structures. Consequently, the network becomes more flexible and it is easier to adjust to changes (Bitkowska, 2009). However, although theoretically there are not any obstacles to base cooperation on a process structure (all partners can identify processes and manage them in order to optimize flow of resources), such an orientation is very rarely seen. Public offices (communes) have implemented a functional structure and exploit it when they build relations with other organizations (Nowak, 2006). Such an atomization makes it more difficult to coordinate operations between particular elements of the chain which creates the process of providing services (Flieger, 2012).

Conclusions

The concept of network cooperation may constitute a vital element of creating a modern model of providing public services (Jones et al., 1997; Head, 2008; O'Leary et al., 2010; Hooghe, Marks, 2001; Lynn, 2006). The process of achieving network maturity can be related to possible forms of cooperation between communes and private companies. Thus, the potential to create such network relations is considerable.

However, in order to exploit the possibilities of such a cooperation optimally, both parties need to take up active, well thought-out measures, including: initiating direct relations, developing partnership approach (limiting a supervisor's perspective), focusing on creating teams to realize common projects, changing configuration of the net to adjust to needs of clients (flexibility), considering the network in the context of a process orientation.

References

Baker, H.R. (1993). Building multi-community rural development partnership. In: R.C. Rounds (ed.), *The structure, theory and practice of partnership in rural development* (pp. 37–42). ARRG working papers series, no 5.

Bitkowska, A. (2009). *Zarządzanie procesami biznesowymi w przedsiębiorstwie*. Warszawa: Vizja Press & IT.

Downes, S. (2005). Semantic networks and social networks. *The Learning Organization*, *5*, 411–415.

Flieger, M. (2016). Optymalizacja funkcjonowania instytucji administracji publicznej poprzez kooperację w sieci. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *421*, 124–125.

Flieger, M. (2012). *Zarządzanie procesowe w urzędach gmin. Model adaptacji kryteriów dojrzałości procesowej*. Poznań: Wydawnictwo Naukowe UAM.

Grudzewski, W., Hejduk, I. (2004). *Metody projektowania systemów zarządzania*. Warszawa: Difin.

Head, B.W. (2008). Assessing network-based collaborations: effectiveness for whom? *Public Management Review*, *6* (10).

Hooghe, L., Marks, G. (2001). *Multi-Level Governance and European Integration*. London–New York-Boulder-Oxford: Rowman & Littlefield Publishers.

Jones, C., Hesterly, W.S., Borgatti, S.P. (1997). A general theory of network governance: exchange conditions and social mechanisms. *Academy of Management Journal*, *4* (22), 912–920.

Lynn, L. (2006). *New Public Management*. New York: Routledge.

Łobos, K. (2000). Organizacja sieciowa. In: K. Perechuda (ed.), *Zarządzanie przedsiębiorstwem przyszłości, koncepcje, modele, metody* (pp. 98–103). Warszawa: Placet.

Mitręga, M. (2010). *Zdolność sieciowa jako czynnik przewagi konkurencyjnej na rynku przedsiębiorstw*. Katowice: Wydawnictwo Akademii Ekonomicznej im. Karola Adamieckiego.

Newman, J., Barnes, M., Sullivan, H., Knops, A. (2004). Public Participation and Collaborative Governance. *Journal of Social Policy*, *2*.

Nowak, J.F. (2006). *Modernizacja lokalnej administracji publicznej a rozwój lokalny*. Poznań: Wydawnictwo Akademii Ekonomicznej w Poznaniu.

O'Leary, R., Slyke, D., Kim, S. (2010). *The Future of Public Administration around the World: The Minnowbrook Perspective*. Washington DC: Georgetown University Press.

Perechuda, K. (2000). *Zarządzanie przedsiębiorstwem przyszłości, koncepcje, modele, metody*. Warszawa: Placet.

www.gminaskawina.pl/index.php?option=16&action=news_show&news_id=11485 (3.01.2017).

www.gostyn.pl/SPOTKANIE_BURMISTRZA_Z_PRZEDSIEBIORCAMI_WSPOLPRACA_SPRZYJA_OSZCZEDNOSCIOM.html (13.01.2017).

Zimniewicz, K., Piekarczyk, A. (2010). *Myślenie sieciowe w teorii i praktyce*. Warszawa: Polskie Wydawnictwo Ekonomiczne, 12–24.

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EVALUATION OF CONDITIONS FOR QUALITY LOGISTIC SERVICES IN THE AREA OF REFRIGERATED TRANSPORT

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Abstract

Logistic services are evaluated primarily by measuring customer satisfaction. A satisfaction measurement provides information on the operations of an organization and how effective it is in meeting the customers' needs.

The aim of this paper is an evaluation of the organizational conditions of the customer satisfaction level regarding the quality of logistic services within three groups of transport of food products. In turn, the range of the conducted research involved aspects of organizational conditions, such as: effects of the cooperation with a provider of logistic services in the field of transport of food products and the usefulness of the compulsorily implemented management systems in an enterprise.

The studies were carried out based on a research survey questionnaire addressed to purchasers of logistic services. The study subjects were companies that use services for refrigerated transport. The χ^2 test was used to define the relationship between the effects of the cooperation with a service provider and the spatial range of their activities, the respondents' job seniority and education, as well as to estimate the dependence of the evaluation of usefulness of the compulsorily implemented management systems in a company on the spatial range of their activities.

Introduction

The cold chain is a term applied to food handling and distribution where the product is maintained at suitable conditions all the way from the cooling or freezing process to the point of sale. The transport of cooled produce was one of the first major uses of mechanical refrigeration. Logistics developments have enabled worldwide distribution

of food under temperature-controlled conditions. The temperature of the commodity must be maintained within specified limits (Hundy, 2008).

The food industry uses important quality management tools, mainly the Good Manufacturing Practices (GMP), Manual Good Hygiene Practices (GHP) and Hazard Analysis Critical Control Point (HACCP).

Transporters and/or containers used for transporting foodstuffs must be kept clean and in good condition, in order to protect food from contamination and should, where necessary, be designed and constructed in such a manner as to permit adequate cleaning and disinfection (Zymberaj, Resyli, Kolgeci, Berisha, 2013).

GMP is a system for ensuring that products are consistently produced and controlled according to quality standards. It is designed to minimize the risks involved in any food production that cannot be eliminated through testing the final product (Finke, 2003).

The Hazard Analysis Critical Control Point (HACCP) philosophy was introduced in European Community legislation in 1993 with Council Directive 93/43/EEC on the hygiene of foodstuffs. It specifies that all business operators shall identify any step in their activities which is critical to ensuring food safety and ensure that adequate procedures are identified, implemented, maintained and reviewed on the basis of the HACCP principles (Panisello, 1999).

Table 1 provides a description of management systems for contact with food, which served as the basis for analysis.

Table 1. Identification quality management tools

Quality management tools	Description
GMP (Good Manufacturing Practices)	That part of quality assurance aimed at ensuring that products are consistently manufactured to a quality appropriate to their intended use. It is thus concerned with both manufacturing and quality control procedures (Anon, 1977).
GHP (Good Hygiene Practices)	GHP regulations address issues related to record-keeping, staff training, public hygiene, verification (control) equipment and investigate (revue) the clamor (Zymberaj, Resyli, Kolgeci, Berisha, 2013).
HACCP (Hazard Analysis Critical Control Point)	HACCP is widely recognized in the food industry as a preventive system for managing food safety. The HACCP system identifies critical control points in the production process that are essential to monitor and control products safety. HACCPs preventive focus is seen as more effective than testing a product and then destroying or reworking it (Bata, 2005).

Source: own research.

Literature review

The design and maintenance of vehicles and transportation equipment must be such as to ensure that it does not cause the food that it transports to become unsafe. For example, they must be suitable and adequately cleanable for their intended use and capable of maintaining temperatures necessary for the sanitary transport of food (Guide Refrigerated Transport, 2016).

The aim of the research was to assess the organisational conditions for customer satisfaction with the quality of the logistic services in the transport of various groups of products that require controlled temperature in transport.

The writings on the subject offer a number of definitions interpreting logistic services which essentially differ in the degree of their detail (Gołembska, 2010; Kilibarda, 2012). Essentially, a logistic service is an “activity which is intended to satisfy logistic needs of businesses and people” (Dembińska-Cyran, 2005, p. 205).

A logistic service is a response to the customer's needs and expectations and is about delivering the right product, at the right time, at the right price, and with due service quality (Jałowiec, 2010; Wejers, 2012).

What is being accentuated increasingly frequently in the development of logistics is its link with quality management (Gajewska, 2010). Logistic services are evaluated primarily through customers' satisfaction. A comprehensive definition of customer satisfaction in terms of pleasurable fulfilment is given by Oliver (1997): "…Satisfaction is the consumer's fulfilment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption – related fulfilment, including levels of under-or overfulfillment…" (Grigoriudis, Siskos, 2010, p. 4).

The level of the customer's satisfaction reflects the degree to which the total product offered by an organisation satisfies the set of the customer's requirements (Hill, 2003). Indeed, the customer's opinion is the key measure of the quality of logistic services (Mentzer, 2001; Xu, 2008). A satisfaction measurement provides information on the organisation's operation and effective satisfaction of the customers' needs. Satisfaction may be interpreted either from the viewpoint of a specific transaction or a collective point (Saura, 2008). What matters a lot is a subjective nature of the customer's perception of a product or a service which largely depends on the customer's individual characteristics and requirements concerning the product or the service (Sikora, 2010).

Material and research methods

The analysis of the research took account of the positive and negative impact of the cooperation with a provider of logistic services in the transport of foods. Also obligatory quality management systems in businesses were analysed, to include: Manual Good Hygiene Practices (GHP), Good Manufacturing Practice (GMP) and Hazard Analysis Critical Control Point (HACCP).

The research was done at the end of 2011 and beginning of 2012, and in 2017, and was quantitative in its nature. The research used a questionnaire which were sent out to 1321 purchasers of logistic services. The respondents were customers using logistic services in refrigerated transport, such as manufacturers and distributors of foods, hypermarkets and groceries. A total of 217 questionnaires were obtained electronically and directly from the respondents.

Results and discussion

The analysis of the organisational conditions started with a presentation of the customers' declarations on the impact of their cooperation with logistic service providers in road transport of foods on their satisfaction with the service quality (Table 2).

Table 2. Evaluation of the impact of cooperation with the company in the field of food products transport

Impact of cooperation with the logistic service provider in the field of food products transport on business satisfaction	Percentage of indications				
	no influence (0 pt.)	little impact (1 pt.)	average impact (2 pt.)	huge impact (3 pt.)	very big impact (4 pt.)
Positive influence	3.2	11.87	15.98	40.64	28.31
Negative influence	24.2	19.63	12.79	19.63	23.74

Source: own research.

According to the declarations of service purchasers, for approx. 69% of them the impact of cooperation with the service provider on their satisfaction was positive, and the impact was evaluated as big and very big. The research also showed a high percentage of customers who saw the impact of their cooperation with logistic service providers on their satisfaction as negative (more than 43%). This suggests that nearly half of the respondents are dissatisfied with the fulfilment by providers of logistic services in food product transport of the agreed terms and conditions of contract or the results of their mutual cooperation, and hence conflicts arise between the parties.

The statistical analysis covered the dependence between analysed variables (Table 3). The indicator p is the result of the significance test χ^2. The p figure below 0.05 means that there is a statistically significant dependence between the variables under analysis.

Table 3. Dependence evaluation of the impact of cooperation with the company in the field of food products transport on the spatial range of their business activities

Impact of the cooperation		Evaluation of impact of cooperation				P-value
		local	regional	nationwide	internationalal	
Positive	no influence	42.86	28.57	14.29	14.29	**0.00004**
	little impact	11.54	46.15	23.08	19.23	
	average	11.43	0.00	25.71	62.86	
	huge	11.24	15.73	17.98	55.06	
	very big impact	6.45	9.68	29.03	54.84	
Negative	no influence	18.87	7.55	16.98	56.60	**0.00893**
	little impact	6.98	27.91	13.95	51.16	
	average	7.14	14.29	39.29	39.29	
	huge	0.00	13.95	23.26	62.79	
	very big impact	17.31	15.38	26.92	40.38	

Explanation: underlined value means numbers of evaluation >10.

Source: own research.

Both in the case of a positive and negative impact of the cooperation with the provider the value of the indicator was $p < 0.05$. It was demonstrated that the wider the spatial reach of the provider's operations, the greater the positive impact of the cooperation with the logistic provider. However, the dependence between the spatial reach of the provider's operations and a negative impact of the cooperation on the company's activities cannot be clearly defined which is evidenced by the varied ranks.

The statistical analysis also covered the dependence between the respondent's seniority and the evaluation of the relationship with the provider (Table 4).

A significant dependence was demonstrated between the respondents' seniority and the evaluation of a positive and negative impact of the cooperation with the logistic provider on the functioning of the company ($p < 0.05$). The higher the seniority the higher the evaluation of the impact of the relationship with the logistic service provider. It seems that more experienced employees are capable of more analytic evaluation of the mutual relationship with the service provider.

Table 4. Dependence of the evaluation of the impact of cooperation with a logistic service provider in the field of food products transport on job seniority

Impact of cooperation		Evaluation of impact (%)				P-value
		from 0 to 3 years	over 3 to 6 years	over 6 to 9 years	more	
Positive	no influence	0.00	66.67	0.00	33.33	
	little impact	30.77	19.23	7.69	42.31	
	average	20.00	34.29	11.43	34.29	**0.0252**
	huge	35.96	14.61	12.36	37.08	
	very big impact	48.39	19.35	12.90	19.35	
Negative	no influence	28.30	18.87	9.43	43.40	
	little impact	28.57	33.33	9.52	28.57	
	average	57.14	14.29	7.14	21.43	**0.0190**
	huge	34.88	27.91	18.60	18.60	
	very big impact	36.54	11.54	11.54	40.38	

Explanation: underlined value means numbers of evaluation >10.

Source: own research.

The dependence was also studied between the respondents' education and the impact of the cooperation with the provider of logistic services in the transport of food products. The value of p is the result of the significance test χ^2 (Table 5).

Table 5. Dependence of the evaluation of the impact of cooperation with the company in the field of food products transport on the respondent's education

The impact of cooperation		Evaluation of impact (%)				P-value
		vocational	secondary	Bachelor's degree	higher education	
Positive	no influence	0.00	14.29	0.00	85.71	
	little impact	0.00	7.69	7.69	84.62	
	average	11.43	17.14	17.14	54.29	**0.0070**
	huge	2.25	24.72	15.73	57.30	
	very big impact	3.23	16.13	33.87	46.77	
Negative	no influence	7.55	18.87	20.75	52.83	
	little impact	0.00	18.60	4.65	76.74	
	average	7.14	0.00	25.00	67.86	**0.0040**
	huge	0.00	18.60	18.60	62.79	
	very big impact	3.85	28.85	28.85	38.46	

Explanation: underlined value means numbers of evaluation >10.

Source: own research.

The statistical analysis demonstrated that there is a significant dependence between the analysed variables ($p < 0.05$). It was noted that the higher the employees' education the higher their evaluation of the impact of the cooperation with the service provider on their company's satisfaction. It was also demonstrated that the higher the employees' education the higher their evaluation of the negative impact of the relationship with the logistic provider

on the satisfaction. The above dependencies are correct because employees with higher education have the relevant knowledge and higher awareness and hence are more capable of evaluating the impact of the cooperation between the customer and the service provider.

The respondents' opinions were also used to evaluate the usefulness of the obligatory management systems implemented with the service providers (Table 6).

Table 6. Evaluation of the usefulness of the implemented management systems

Management systems	Percentage of indications				
	very little usefuless (1 pt.)	little usefulness (2 pt.)	average usefulness (3 pt.)	high usefulness (4 pt.)	very high usefulness (5 pt.)
GHP	5.09	11.11	22.69	37.96	23.15
HACCP	8.29	10.60	18.89	32.72	29.49
GMP	11.11	15.28	29.17	26.39	18.06

Explanation: Due to the fact that respondents did not provide an answer the attempt is: for GHP and GMP, N = 216, for HACCP N = 217.

Source: own research.

Nearly 62% of the respondents found the GHP and the HACCP useful and very useful. For more than 44% of the respondents, the implementation in a transport company of the GHP was considered useful and very useful. It is to be noted further that none of the respondents mentioned uselessness of the implementation of any of the systems under analysis for the purposes of service quality improvement.

The statistical analysis covered the dependence of the evaluation of the management systems that were implemented on the spatial reach of the service purchasers' activities. The value p is the result of the significance test χ^2 (Table 7).

Table 7. Dependence evaluation of the usefulness of GHP and HACCP on the spatial range of business activities (logistic purchasers)

Level of usefulness of systems		Evaluation of usefulness (in %)				P-value
		local	regional	nationwide	international	
GHP	no influence	9.09	18.18	36.36	36.36	0.95191
	little impact	12.50	16.67	20.86	50.00	
	average	8.16	16.33	20.41	55.10	
	huge	14.63	17.07	19.51	48.78	
	very big impact	8.00	12.00	28.00	52.00	
HACCP	no influence	5.56	44.44	5.56	44.44	**0.00355**
	little impact	13.04	8.70	26.09	52.17	
	average	9.76	29.27	21.95	39.02	
	huge	16.90	11.27	23.94	47.89	
	very big impact	6.25	6.25	26.56	60.94	

Explanation: underlined value means numbers of evaluation >10.

Source: own research.

The statistical analysis demonstrated no impact of the spatial reach of the company's activities on the evaluation of the usefulness of the Good Hygienic Practices implemented with the company (service provider). The values of p were, in the analyses cases, above 0.05. What was demonstrated, however, was a dependence of the evaluations of the usefulness of the implementation of the HACCP system on the reach of the customer's activity. It was found that the greater the spatial reach of the company's operations the higher the evaluation of implementation of the GHP (Manual Good Hygiene Practices) and the HACCP system.

Conclusions

In conclusion to the analysis, it is to be noted that approx. 69% of the respondents consider the impact of the cooperation with the service provider on the functioning of the company and its satisfaction as positive. A significant dependence was demonstrated of the impact of the cooperation on the satisfaction with the service quality on the spatial reach of the service purchaser's operations. The wider the spatial scope of activities (from local to international), the higher the evaluation of the positive impact of the relationship with the service provider. Further, a correspondence was identified between the evaluations of a positive impact and the respondents' seniority and education. As regards the usefulness of the obligatory management systems to be introduced by service providers, concerning the Good Hygiene Practices and the HACCP system, the respondents mentioned their usefulness at the level of above 3.5 points (that is between average and high usefulness). Hence, none of the management systems introduced obligatorily in service providers which were analysed obtained an average of high usefulness. What was demonstrated, in the other hand, was a significant dependence of the evaluations of the usefulness of the implementation of the HACCP system with the provider on the spatial reach of the purchaser of logistic services in the area of food product transport.

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References

Anon, (1997). *Guide to Good Pharmaceutical Manufacturing Practice*, 2nd edition. London: HM Stationery Office.

Bata, D., Drosinos, E.H., Athanasopoulos, P., Spathis, P. (2006). Cost of GHP improvement and HACCP adoption of an airline catering company. *Food Control*, *17*, 414–419.

Dembińska-Cyran, I., Jedliński, M. (2005). Usługi logistyczne. In: S. Flejtarski, A. Panasiuk, J. Perenc, G. Ros (eds.), *Współczesna ekonomika usług*. Warszawa: Wydawnictwo Naukowe PWN.

Finke, M., Schulz, H. (2003). Z.U. Aktuelles GMP – Regularien (GMP regulatory documents: current issues). *Pharmazeutische Industrie*, *10* (65), 1065–1069.

Gajewska, T. (2010). Kryteria oceny jakości usług logistycznych. In: T. Sikora (ed.) *Zarządzanie jakością – doskonalenie organizacji* (pp. 30–38), Kraków: PTTŻ Publishing.

Gołembska, E. (ed.) (2010). Kompendium *wiedzy o logistyce*. Warszawa: Wydawnictwo Naukowe PWN.

Grigoroudis, E., Siskos, Y. (2010). *Customer Satisfaction Evaluation. Methods for Measuring and Implementing Service Quality*. Springer.

Hill, A.J. (2003). *Pomiar satysfakcji i lojalności klientów*. Kraków: Oficyna Ekonomiczna.

Hundy, G.F., Trott, A.R., Welch, T.C. (2008). *Refrigeration and Air-Conditioning* (Fourth Edition). Butterworth Heinemann.

Jałowiec, T., Nowak, I. (2010). Jakość w outsourcingu usług logistycznych. *Logistyka*, *3*, 70–75.

Kilibarda, M., Andrejic, M. (2012). *Logistics service quality impact on customer satisfaction and loyalty.* 2nd International Conference on Supply Chains (ICSC). Belgrade. Serbia.

Mentzer, J.T., Flint D.J., Hult, G.T.M. (2001). Logistics Service Quality as a Segment Customized Process. *Journal of Marketing*, *65*, 82–104.

Oliver, R.L. (1977). Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation. *Journal of Applied Psychology*, *4* (62), 480–486.

Panisello, P.J., Quantick, P.Ch., Knowles, M.J. (1999). Towards the implementation of HACCP: results of a UK regional survey. *Food Control*, *10*, 87–98.

Saura, J.G., Frances, D.S., Contri, B.G., Blasco, F.M. (2008). Logistics service quality: a new way to loyalty, *Industrial Management & Data Systems*, *5* (108), 650–668.

Sikora, T., Nowicki, P. (2010). Czynniki kształtujące satysfakcję klienta oraz korzyści z pomiaru satysfakcji klienta w procesie doskonalenia jakości. In: T. Sikora (ed.) *Zarządzanie jakością – doskonalenie organizacji* (pp.171–178). Kraków: PTTŻ Publishing.

Xu, J. (2008). Logistics Service Quality Analysis Based on Gray Correlation Method. *International Journal of Business and Management*, *1* (3), 58–61.

Wejers, S., Glöckner, H., Pietras R. (2012). Logistic service providers and sustainable physical distribution. *LogForum*, *2* (8), 157–165.

Zymberaj, I., Resyli, P., Kolgeci, M., Berisha, G. (2013). Manual Good Hygiene Practices (GHP). *Agjencia e Ushqimit dhe Veterinarise* (AUV).

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THE ROLE AND IMPACT OF TRANSPORT SERVICES DURING WORLD YOUTH DAY 2016

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Abstract

Many elements contribute to the shaping of a tourist product. One of them is transport services. It does not only offer the possibility to reach a certain significant destination, but also to move around the target area. The topic of transport services supporting huge mass events, such as World Youth Days, is especially interesting. The essay presented the results of the research as well as provided an analysis and estimation to what extent expectations were met and the needs related to transport services during World Youth Day hosted by the city of Cracow were satisfied. The main aspect for the study was the idiosyncrasy of the transport service market, further on the issue of competitiveness between particular branches of transport was covered. The questions of the role and significance of transport services were raised, paying special attention to transport availability of a certain destination on the example of Cracow, based on the data collected during Youth Day held in 2016 as well as the Research on Tourist Movement within the City of Cracow in recent years.

Introduction

In many places in the world, tourism can only develop when access to a certain destination is guaranteed. Nowadays, it is not only important that a certain connection exists, but that a traveller may choose the most convenient and comfortable means of transport, as well as be granted a reliable mobility option at the target destination, which contributes to what decisions they will make. In particular, it is essential to guarantee and secure

the transport services during huge mass events, which *World Youth Days* are. It must be noted that it is not only a religious and spiritual event, but it also poses a huge effort from organisational and logistic point of view, especially in the aspect of servicing and communication solutions. Between 23rd July and 1st August 2016, the city of Cracow hosted *XXXI World Youth Day* (further referred to as WYD 2016), which was the largest mass event ever organised in our country – almost 3 million pilgrims from 187 countries participated in it. WYD 2016 required numerous organisational actions to be taken, not only to facilitate the arrival of the pilgrims from many parts of the world, but also to provide transportation within the city borders and its surroundings as part of the meetings and celebrations held. In this evaluation, we undertook the issues on the significance and role of the transport service on the example of the case study of WYD 2016, yet paying also attention to the data obtained from the annual Research on Tourist Movement within the City of Cracow. It is worth mentioning that the transportation issues should be viewed from many perspectives due to the fact that preparation and organisation of such events – specific international mass events – are not an easy task to undertake. In particular, what is essential is the questions concerning communication solutions used, guarantee of safety and security, quality requirements, as well as tourists' patterns and preferences when choosing means of transport to reach such destinations.

The nature of transport service and its impact on tourist product

The existence and availability of reliable transportation is a key factor to facilitate correct operation of a tourist system. The development of tourism is closely related to the innovations in transport services occurring right in front of our eyes. The development of transport services led to the reduction of costs and time of the transport services, which, as a result, changed tourism from an elitist phenomenon to a common one (Sawicki, 2012, p. 1957). In the 19th century, the railway revolution made it possible for T. Cook to offer the first type of tourist packages for a greater number of people. Similarly, the appearance of wide-bodied passenger aircraft in the 1960's, so called jumbo jets, contributed to the mass spread of international tourism (Gierczak, 2011, p. 278). It is accepted that a tourist service cannot be realised without providing transport service since transportation is a key element facilitating the connection between the place of origin and the destination. The transport service is not only an important, but also necessary component of tourist product because without it the tourist product cannot be consumed (Khadaroo, Seetanah, 2007, p. 1023). Among tourist products we can distinguish a product in the strict sense, and a broader one – it is a complex concept and it consists of many various elements: both tangible and intangible assets, including transport services. We recognise the nature of the product, real product and extended product – transport services are in the two latter groups. In the literature on the subject we can also find the concept of simple products, which includes a particular tourist service, e.g. hotel, boarding, guiding or just transport (Stec, 2015, pp. 233–248).

The concept and role of transport service is closely related to transport availability (Kwarciński, 2012, pp. 169–173), which in economic aspects reflects generalised monetary and non-monetary costs (time, money, effort, discomfort, risk) necessary to reach a particular place or function. Transport availability plays a key role for a given destination, especially for its correct development from the perspective of tourist economy. Moving around a target destination is equally essential; transport services may also play a recreational and entertaining role, and some means of transport are a tourist attraction in themselves, for example a narrow-gauge railway ride or a ferry (Gosik, Zimon, 2014, p. 42). Transport service does not only decide on economic attractiveness of the region, but is also an essential component for development of the tourist product, contributing to its overall rating. It means that transport service is one of the key services conditioning tourist movement, first of all to provide connection to and

within a tourist destination, but also essential to consume a tourist product (cf. Turek, 2009, pp. 27–40; Panasiuk, 2008, pp. 70–108).

We can distinguish the following four main transport branches: road (car/coach), railway, waterways and aviation. Detailed comparative analyses of their pros and cons prove that air transport guarantees relatively the shortest time of travel, railway transport provides a high level of safety, waterways transport is useful for sightseeing and recreational purposes, road transport, on the other hand, is the most convenient because it allows to directly reach a destination, a tourist attraction or accommodation (cf. Bednarczyk, Grabińska, pp. 44–46; Mammadov, 2012, pp. 381–386). Prospective tourists also show individual preferences, which significantly influences their choice of a particular means of transport (cf. Wilkońska, Rotter-Jarzębińska, 2013, p. 175). The decision to choose a means of transport is made based upon various factors such as: possibility to access a destination directly; price (funds for travel); travel time (time limitations, speed); quality; comfort, convenience or additional services; distance to destination (short/long-hauled or domestic/international/intercontinental; the carrier's reliability (infallibility, transport capacity), restrictions on luggage, electronic system of booking, and an increasingly important factor – safety (cf. Westlake, Robbins, 2005, p. 463). Transport services have to be viewed from the perspective of many factors which significantly determine the decision made by a prospective passenger concerning their choice of a convenient means of transport, resigning at the same time from alternative forms or even changing tourist destination. Since a prospective passenger makes that choice, particular branches of transport compete. The process is referred to as substitutive competitiveness. The basis for this process is the phenomenon of substitutability in transportation, which results from economical homogeneousness of transport services and facilitates replacement of one with any other (cf. Bednarczyk, Grabińska, pp. 55–66). The competition relies mainly on competing for a prospective customer, propagating and easing access to the services offered, providing services which are increasingly cheaper, but at the same time of higher quality, because the demand for transport services influences substitutability of those services, connected by high cross-price elasticity of demand. Current market requirements force carriers to provide high security measures and quality on every stage of travel, and contemporary travellers expect a broad and personalised offer of transportation services. The notion concerning the delivery of transportation services during important events is a complex problem not only in economic, technical and organisational aspect, but also due to other challenges and needs.

World Youth Day 2016 from the perspective of transport services

World Youth Day made history for all Christians over the world. This special event of religious nature has been taking place regularly every 2–3 years in various countries since 1984, each time gathering a huge swarm of young people (Singleton, 2009, pp. 1–12). With time, WYD developed its program up to a couple of days, when the peak of the event is always a few days' gathering in one city with the presence of the Pope. In 2016, 31st WYD took place, and the main host of the edition was the City of Cracow. Prior to that, in 1991 Poland organised WYD in Częstochowa and is in this way – beside Italy and Spain – one of the three countries which hosted pilgrims to this religious event twice. The events usually attract from a few thousands up to a few millions of pilgrims. World Youth Days have always attracted huge masses of participants from other parts of the world, with the peak number (estimated at 5 million) of pilgrims reported in Manila in 1995, followed by Rio de Janeiro with its 3.5 million visitors in 2015. The high level of internationalisation observed from the beginning has ranged from 40 countries to 200. Nowadays, representatives from 160–170 countries on average participate in the events.

The latest WYD saw almost 3 million pilgrims during the whole period, facing the challenge of providing transportation and communication for about 1.5 million people at its culminating moments like the Holy Mass in Brzegi. Through the website, altogether 356,294 pilgrims from 187 countries registered for WYD 2016, with the most from Poland (78,443) and Italy (63,496). From France 32,979 people confirmed their arrival, from Spain – 30,592; the USA and the remaining North America – 23,563; Germany – 11,653; Brazil – 9,777; Czechia – 5,945; Slovakia – 5,666 and Portugal – 5,454. The remaining participants were not registered, and this group primarily consisted of the Polish youth. Among foreigners who came to WYD in Cracow, the top groups were from France (16.76%) and Italy (15.68%), significantly surpassing Germans (8.16%), Spaniards (6.36%) or Portuguese (4.99%), and visitors from beyond the pond (the USA) accounted for about 7.08% participants (Research on WYD, 2016). The organisation of WYD 2016 was connected with numerous actions aimed at not only enabling a huge number of pilgrims from all over the world to come to Cracow, but providing for their mobility within the city and its surroundings to access the events, meetings and celebrations. It has to be noted that the organisers, predicting huge numbers of tourists (cf. Szarata, Drabicki, 2016, pp. 522–530), decided to heavily rely on public transportation according to the postulates and guidelines concerning the benefits from the prioritising of public transport services (cf. Gutiereez, Miravet, 2016, p. 3). Considering the question of transport availability, it has to initially be noted that Cracow lies on a very important communication route and is connected with many cities and regions both by motorways (A4) and express roads (S7, 94), or railway connections (there are two important stations: Central Station and Kraków Płaszów). It is significant that Cracow is conveniently located close to the second largest airport in Poland, Kraków-Balice. The existence and smooth operation of railway stations and airports, or road corridors, has a huge impact on Cracow's accessibility (cf. Jaremen, Nawrocka, 2012, pp. 401–414; Seweryn, 2007, pp. 25–44).

Due to the analysis, motifs and preferences of tourists heading for WYD in Cracow in 2016 not only based on the data from the research on WYD 2016, but also from the perspective and in relation to the annual research on tourist movement within the City of Cracow. In the above mentioned analyses, the means of transport mentioned by respondents were aggregated. In the rows of Table 1 options of variants mentioned by respondents were places, and in columns the names of aggregates are listed. As it may be noticed, in the case of private cars and trains no equivalents were needed. The planes of budget airlines, regular airlines and charters were aggregated in the

Table 1. The rule of aggregation of transportation categories mentioned by respondents

Means of transport mentioned	Aggregator						
	plane	car	bus	train	(empty)	other	total
Car		8,698					8,698
Budget airline plane	5,735						5,735
Train				5,326			5,326
Coach			4,286				4,286
Regular line plane	4,231						4,231
Regular line coach			2,177				2,177
Mini-bus			1,571				1,571
Charter plane	444						444
(Empty)	1				243		244
Other	1		5			197	203
Total	10,412	8,698	8,039	5,326	243	197	32,920

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

analyses under one label – 'planes'. Besides, the category 'bus' includes charter coaches, regular line coaches and mini-buses. Due to the low number of responses concerning 'others' it was omitted in the analyses, as well as the cases of no answer. The results of the aggregation were collected in Table 2.

Table 2. Results of aggregation of means of transport in the categories *planes* and *buses*

Aggregation of means of transport	n	%
Plane	10,410	56
budget airline plane	5,735	31
regular line plane	4,231	23
charter plane	444	2
Bus	8,034	44
coach	4,286	23
regular line coach	2,177	12
mini-bus	1,571	9
Total amount	18,444	100

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

The percentage shares of the means of transport used by tourists coming to Cracow were exemplified in graphs (1–4). The first graph presents all types of transportation for all the years 2008–2016, while the other two graphs refer to the last three years 2014–2016. One of those graphs presents the structure of the types of transportation over the years, and the other to the contrary – the changes occurring in particular years within each category of transportation.

Summing up the up-to-date analyses, it has to be stated that the preferences of tourists arriving at WYD 2016 were slightly different from the preferences of tourists obtained in annual reports. The organisers of WYD 2016 decided to prioritise public transport, and as the research and analyses show, pilgrims heading for WYD 2016 in Cracow mainly used various services of the public transport, especially road public transport (coaches were used by 48% respondents from Poland and abroad who came to WYD, and only 8% of pilgrims used private cars). Another means of transportation favoured by pilgrims was the train (a third of participants). The trains which ran during WYD (2,596 regular lines and 398 special trains ordered by dioceses) carried 1.1 m passengers altogether. The coordinator of railway transport for WYD was PKP Polish Railways, taking responsibility for the infrastructure and the timetable. 10,000 railway workers altogether were responsible for servicing transportation for WYD, including 200 informative staff and 100 mobile ticket cashiers at the railway stations. Planes were used by 16% of all participants of WYD. A dominant role in the air transport was played by Cracow's airport – John Paul II International Airport Kraków-Balice. Between 19th July and 9th August 2016, Cracow airport served about 40,000 passengers and ran 208 extra air traffic operations. On 25 and 26th July, there were 16 flights outside the regular timetable. The record number of passengers came to Cracow on Sunday 24th July and the next day – 10,312 and 10,453 respectively; though pilgrims arriving in Poland also used other airports, e.g. Warsaw Chopin Airport, Katowice International Airport, Rzeszów-Jasionka Airport. Air transport was chosen by pilgrims from remote locations and older people (over 60yo) due to convenience. Such a spread of means of transport used resulted from the fact that participants of WYD were arriving in Cracow in great numbers within a short time, which is why planes and cars were used less frequently than collective transportation (buses, trains).

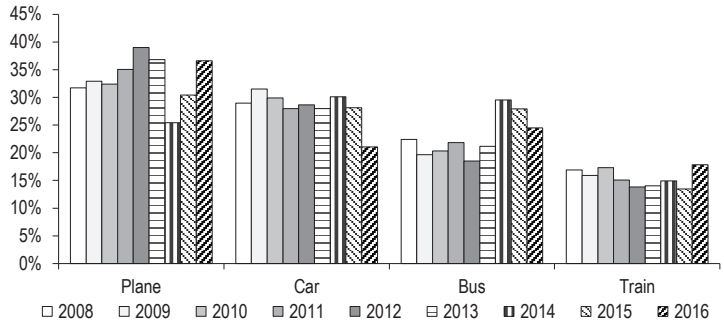

Figure 1. The percentage share of the means of transport used by tourists visiting Cracow in the years 2008–2016

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

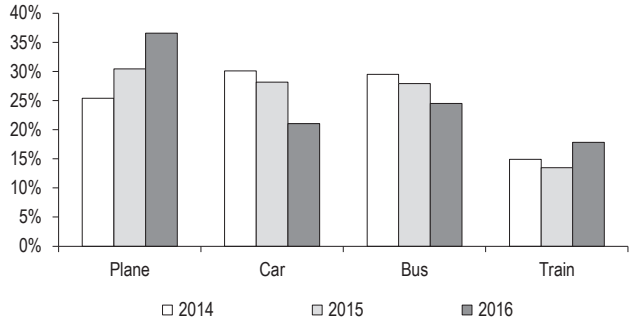

Figure 2. The percentage share of the means of transport used by tourists visiting Cracow in the years 2014–2016

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

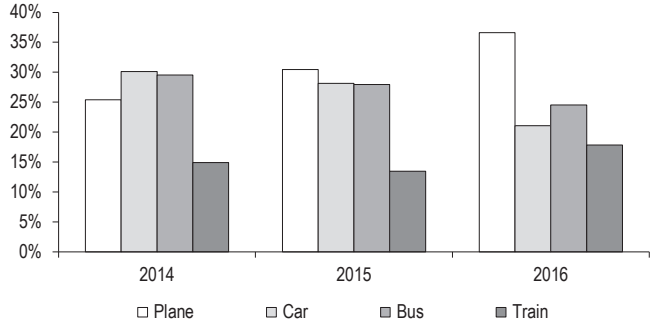

Figure 3. The percentage share of the means of transport used by tourists visiting Cracow in the years 2014–2016

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

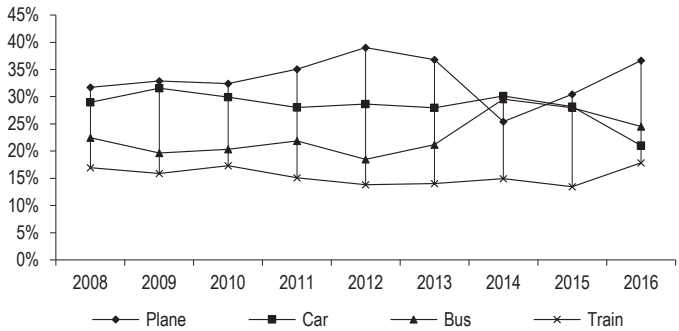

Figure 4. The percentage share of the means of transport used by tourists visiting Cracow in the years 2008–2016

Source: own research based on the Research on WYD 2016 and the Research on Tourist Movement within the City of Cracow 2008–2016.

One of the vital challenges is the transportation solution in Cracow that was used in the context of the organisation and course of the events of WYD 2016. Due to the special attention paid to the security during WYD 2016, special commands were set up at transport stations, e.g. Railway Emergency Command. During the events in Cracow, municipal public transportation played a significant role. MPK (Municipal Transport Company) in Cracow had 288 trams and 623 buses at their disposal. Some areas were completely excluded from traffic and available only to pedestrians, emergency vehicles and technical support. Special passes were to make public transport attractive, and all Pilgrim's Packages supported free rides on the public transportation, including agglomeration and railway. It must be remembered that it was not only passenger transportation that was a real challenge, but also distribution and checking tickets, proper marking and information for passengers within the venues serving as stations, or marking on the communication routes. For example, 70 volunteers from Poland, Slovakia, Lithuania, Ukraine, Canada, Germany, Italy, Romania, Malaysia, Croatia and Vietnam worked at Cracow airport. The staff of information points and 24 h Call Centre on the airport premises helped over 19,000 persons (from 23rd July to 3rd August). Also passengers of railways were provided service and help at the highest level. That is why it was decided that special buffer zones be created and mobile cashiers employed. The attitude of the transportation servicemen was also important – their kindness, hospitality, helpfulness towards the needy as well as professional approach to their duties.

Conclusion

The notion concerning the delivery of transportation services during important events are a complex problem not only in economic, technical and organisational aspect, but also due to other challenges and needs. It is essential to set goals and needs within the provided transportation services, especially identifying and estimating transportation demand, preferences for the choice of a means of transportation, setting out the rules for traffic organisation or organisation of the information system. WYD is a form of religious tourism, but it is not only the motivation or religiousness of the participants that have an influence on the perception of WYD, but also organisational issues, especially transportation solutions. It must be mentioned that such an event as WYD has a huge tourist potential and bears far-reaching consequences and results in the economic dimension, or medial and promotional. It is necessary to draw conclusions and point to the guidelines aiming at improving the shaping of a tourist product from the perspective of the offered transport service. In the context of adjustment to tourists' expectations and facing

current challenges and needs, a carefully performed analysis is extremely significant, because it is able to facilitate the implementation and improvement of proper codes of conduct during logistic support of events of a similar dimension and importance, taking part in many places all over the world.

References

Bednarczyk, M., Grabińska, E. (2015). *Airport Competitiveness. Models and Assessment Methods*. Kraków: Jagiellonian University Press.

Gierczak, B. (2011). The history of tourist transport after the modern industrial revolution. *Polish Journal of Sport and Tourism*, 275–281.

Gosik, B., Zimon, G. (2014). Usługi transportowe w obsłudze ruchu turystycznego. *Zeszyty Naukowe*, *843*. *Problemy Transportu i Logistyki*, *28*, 37–48.

Grabińska, E., Mierniczak, P. (2015). Methodology of Tourist Mobility Research as an example of research in the field of interdisciplinary science – current state and prospects of development. *Contemporary Science Methodology*, 61–73.

Gutiereez, A., Miravet, D. (2016). The Determinants of *Tourist* Use of Public Transport. *Sustainability*, *8* (9), 1–16.

Jaremen, D., Nawrocka, E. (2012). Rola dostępności komunikacyjnej obszaru recepcji turystycznej w kształtowaniu popytu tursytycznego. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług*, *83*, 401–414.

Khardaoo, J., Seetanah, B. (2007). Transport infrastructure and tourism development. *Annals of Tourism Research*, *34*, 1021–1032.

Kwarciński, T. (2012). Dostępność transportowa jako paradygmat kształtujący wielkość przewozów w publicznym transporcie pasażerskim. *Logistyka*, *2*, 169–173.

Mammadov, R. (2012). *The Importance of Transportation in Tourism Sector.* 7 the Silk Road International Conference "Challenges and Opportunities of Sustainable Economic Development in Eurasian Countries". Azerbaijan.

Panasiuk, A. (ed.) (2008). *Gospodarka turystyczna.* Warszawa: Wydawnictwo Naukowe PWN.

Ruch turystyczny w Krakowie. Raport końcowy (2003–2016). Retrieved from: http://www.mot.krakow.pl/media/badanie-ruchu-turystycznego/badania.

Sawicki, B. (2012). Rola transport w zagospodarowaniu turystycznym. *Logistyka*, *3*, 1957–1961.

Singleton, A. (2009). *The impact of World Youth Day on belief and behaviour, Annual Meeting of the Society for the Scientific Study of Religion Denver. 1–12. CO.* Retrieved from: https://resource.acu.edu.au/wyd/UPDATES/SSSR2009/091020_AS_SSSR_2009.pdf.

Seweryn, R. (2007). Preferencje turystów przyjeżdżających do Krakowa w zakresie wyboru środka transport. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, *761*, 25–44.

Stec, A. (2015). Wieloaspektowe podejście do definicji produktu turystycznego. *Modern Management Review*, *XX* (22), 233–248.

Szarata, A., Drabicki, A. (2016). Prognozowanie ruchu drogowego związanego z organizacją Światowych Dni Młodzieży w Krakowie. *Prace Naukowe Politechniki Warszawskiej. Transport*, *111*, 522–530.

Turek M. (red.) (2009). *Transport jako składnik produktu turystycznego.* Sopot: Europejska Szkoła Hotelarstwa, Turystyki i Przedsiębiorczości – Szkoła Wyższa w Sopocie.

Uczestnicy Swiatowych Dni Młodzieży w Krakowie 2016 (2016). Małopolska Organizacja Turystyczna, Kraków. Retrieded from: http://www.mot.krakow.pl/media/rok-2016/badania-uczestnikow-sdm-2016-ocena.pdf.

Westlake, J., Robbins, D. (2005). Transportation. In: C. Cooper, J. Fletcher, A. Fyall, D. Gilbert, S. Wanhill, *Tourism: Principles and Practice*. 3rd edition. Essex: Pearson Education Limited.

Wilkońska, A., Rotter-Jarzębińska, K. (2013). Zachowania transportowe osób odwiedzających Kraków w celach turystycznych, ze szczególnym uwzględnieniem przyjazdów w okresie organizacji Euro 2012 w Polsce. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, *1* (22), 173–193.

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BUSINESS SERVICE INDUSTRIES – VENDORS OR OUTSOURCERS? EVIDENCE FROM POLAND

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Abstract

For the last decade dynamic growth of the business services sector has been observed in the Polish economy. In this sector net sales increases and more and more workers are employed. Among the main reasons of the growing demand for business services is the outsourcing of the auxiliary functions that were previously performed inside the enterprises and then outsourced to the companies providing the business services.
The aim of this article was to recognize whether focusing on meeting the demand for the services business service industries also became outsourcers themselves. The analysis of this phenomenon was conducted on the basis of the unpublished aggregated data for the years 2005–2013, collected from the enterprises by the Central Statistical Office. This data confirmed that business service industries provided more services as vendors to outsourcers. However, they also concentrated on their core activity and outsourced many processes or tasks. All population of business service industries varied strongly.

Introduction

The service sector is the dominant sector in the Polish economy, as in the economies of many other countries. According to the data of the Central Statistical Office in the years 2005–2015 the share of this sector (without section O – public administration and national defence) amounted to 65–66% (*Wskaźniki*, 2017) in creation of gross added value, and in the average employment rose from 62,2% in 2005 to 64,5% in 2013 and further to 64,7%

in 2015 (*Bank Danych*, 2017). This sector involves social and business services. First of them meet the needs of customers and second ones are used as intermediate goods mainly in manufacturing processes. In Poland the most workers are employed in trade, repair, transport and construction, however, the employment rises continuously in the business services sector, in which there were 936 business services centres with 212,000 jobs in 2016 (*Business services sector...*, 2016).

Dynamic growth of the business services sector is partially a result of enterprises' answer to the important question: to make or to buy? Looking for ways to reduce costs and focusing on core competence, especially on production, firms made the decision to outsource some tasks or processes to firms specialising in providing such services cheaper and better. The increasing awareness of benefits of outsourcing has caused that more and more companies started to outsource and create demand for different business services, which has contributed to the development of the business services industry. In order to meet this demand and the expectations of their customers, business services industries had to become outsourcing vendors in a relatively short time. Additionally, as a result of offshoring, more and more Shared Services Centres and Business Process Outsourcing (SSC/BPO), which specialised in knowledge intensive, were located in Poland.

Growing competition in the business service market and increasing expectations of clients caused that business service enterprises had to redefine their business models to reduce the costs and to improve operational efficiency. Therefore, analysing processes or tasks they had to consider the basic question: to make or to buy, or in other words: to do it themselves or to outsource? The measurement of outsourcing is difficult because of mismatching of current financial reporting and the lack of published data in the national statistics. Additionally, researchers often focused on the causes of using international outsourcing and its consequences for labour productivity, employment, innovations, competitiveness, etc. For example, some of them studied the employment effects of the international outsourcing of services to low-wage countries (Falk, Wolfmayr, 2008; Amiti, Wei, 2005).

The aim of this article is to recognize whether business service industries in Poland while being outsourcing vendors of services also became outsourcers. The analysis of this phenomenon was conducted on the basis of unpublished aggregated data from the years 2005–2013 coming from the Central Statistical Office. The data was collected from enterprises employing 10 and more workers.

Literature review

The development of the business services sector in Poland was influenced by such factors as: expanding globalization, increase in the tradability of services due to advances in the information and communication technology (ICT), ability to fragmentation of services and outsourcing defined as the contracting out of a business processes or operations to third-party providers regardless of location or capital ties. With ICT many types of operations or functions that are traditionally performed in-house can be outsourced to domestic or foreign providers. Outsourcing is not a new phenomenon; it was initiated by manufacturing firms that began to specialise in core processes creating value additions and contracting out noncore ones. This way the trade in intermediate goods (production components) and also in various services has spurred (Falk, Wolfmayer, 2008).

Increased demand for business services and expectations of outsources caused that enterprises, which existed in business services industry, also had to specialise in core competence and they became outsourcers themselves. In order to be competitive and to deliver services to outsourcers at the appropriate level they also had to invest in fixed assets, abandon some ineffective operations, and specialise in core services.

The survey of almost 3,700 respondents (including 30% of service providers) from eight European countries (Denmark, Finland, Germany, Netherland, Norway, Spain, Sweden, UK), conducted by Ernst and Young in 2013, showed that outsourcing of services was perceived as the next step to decreasing costs and then improving effectiveness. The organizations made services in-house more often (between 81–91%), and outsourced about 9–17%. The most favoured services were IT and business processes (sales, procurement and Human Resources, finance and accounting). There were differences between countries in service outsourcing (*Outsourcing in Europe*..., 2013). Outsourcing abroad was used more often by Finland and Spain. Deloitte survey in 2014 showed that outsourcers focused on optimizing vendor relationships and improving operational flexibility. Their behaviour suggests that vendors had to provide high quality services. In order to do this they developed their core competences and outsourced some services or goods abroad or to vendors in the origin country.

Business services outsourcing market in Poland is one of the leading markets in Europe and in the world. It has been growing continuously for the decade due to the location of foreign and domestic BPO/SSC centres. 10 out of 23 biggest centres in the world operate here, such as: IBM, Intel, Shell, Google, HP, Carlsberg, Procter & Gamble, and others. Apart from the BPO/SSC centres, Polish smaller entities also operate on this market that support mainly domestic and also foreign outsourcers. It can be assumed that the enterprises which deal with business services are outsourcing vendors. This means that net sales of products can be used to identify the size of business services outsourcing market in Poland.

How to measure outsourcing?

The review of literature revealed that outsourcing is defined ambiguously also as: offshoring, integration, fragmentation, international (or foreign) outsourcing (Feenstra, Hanson, 1999; Amiti, Wei, 2005; Lewine, 2012; OECD, 2007; Espino-Rodriguez, Padron-Robaina, 2006). In spite of the diversity, the essence of these terms lies in the separation outside the firm and acquiring some processes or tasks that are not performed internally.

The result of outsourcing are intermediate inputs (goods or services) that are used to prepare the final products. However, the phenomenon of outsourcing is difficult to quantify because of lack of explicit categories, which could define it clearly. Financial statements contain neither the information about the value of outsourcing contracts nor detailed data about intermediate inputs. The author is also aware that not all purchases of intermediate goods or services should be treated as outsourcing and the data coming from these statements make it impossible to determine the true value of one. For example, the available data also includes operations that are a one-time purchase of a component required to produce finished goods or a one-time subcontracting services, but it is not plausible to exclude them.

In order to determine the size of outsourcing intensity, especially of offshoring or international outsourcing intensity, researchers often used indirect, absolute, or relative measures such as the share of imported intermediate inputs in the total purchase of non-energy materials (Feenstra, Hanson, 1999), the share of imported intermediate inputs excluding energy by industry *i* in the total intermediate inputs used by *i* (*Offshoring and employment*..., 2007), the share of imported intermediate inputs including energy in total output (Geishecker, Görg, 2008) and the share of imported intermediate inputs including energy in value added (Hijzen, Görg, Hine, 2005). Growth in outsourcing is noticeable in the expansion of purchasing goods or services that are used as intermediate inputs.

Methodology of research

Business service industries provide services to other enterprises and so become the vendors of outsourcing. The volume of demand for their services is noticed in net sales of products in constant prices of the previous year.

These industries are also outsourcers. In order to measure the value of what they outsource, it was acknowledged that the size of outsourcing will be quantified by the value of intermediate inputs in constant prices of the previous year. Based on the financial statements, which enterprises had to submit to the Central Statistical Office in Poland, it was assumed that the direct material cost (without energy) means the value of material outsourcing and the outside services cost is the value of services outsourcing. The deflator CPI was used to calculate all data because of the lack of a suitable indicator for the business services. The study covered all business services industries in the period 2005–2013 according to the sections and divisions of Polish Classification of Activities – PKD 2007 (that is consistent with NACE Rev.2 codes – 2-digital level) included: publishing activities (J58); information technology activities (J62); other information service (data processing, hosting and related activities) (J63); legal and accounting activities (M69); management consultancy activities (M70.2); architectural and engineering activities, technical testing and analysis (M71); advertising and market research (M73); other professional, scientific and technical activities (M74); employment activities (N78); security and investigation activities (N80); cleaning activities (N81.2) and office administrative, office and other business support activities (N82) (*Wskaźniki*, 2017). In addition to these activities, real estate activities (L68) are included in business services (*Obszary-tematyczne*..., 2017). Due to the availability of data, the large diversity, and the limited size of the article, business services were divided into groups according to Eurostat indicators (Eurostat, 2017): knowledge – intensive services (KIBS) and less knowledge – intensive services (LKIBS). KIBS group consists of the sections: J58, J62-63, M69-71, M73-74, M78 and LKIBS group – sections: L68, N81-N82.

Business services industries as outsourcing vendors in the period 2005–2013 in Poland

In Polish economy in the last decade there has been a rapid growth of the business services sector. This is reflected in the increase in demand for these services (Figure 1) expressed in net sales with compound annual growth rate (CAGR) of 8.7% and in net sales of products with CAGR of 8.4% for the period 2005–2013. Calculated

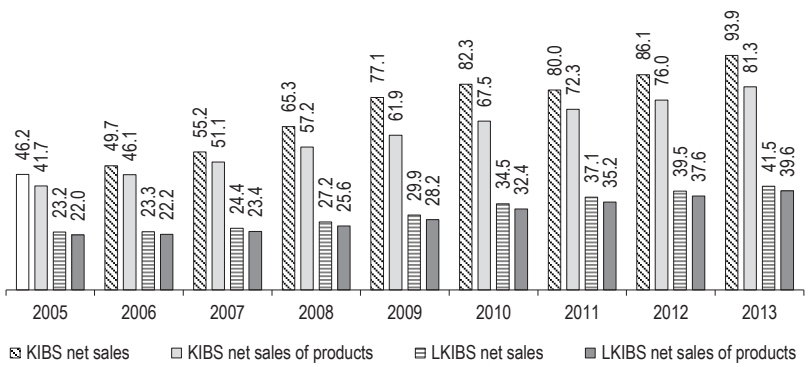

Figure 1. The volume of net sales and net sales of products in 2005–2013 (in billion zł, constant prices of previous year)

Source: own calculations.

CAGR of net sales for KIBS and LKIBS industries showed that net sales of the first group were higher (9.3%) than of the second one (7.6%). Similarly CAGR of net sales of products for KIBS industries was 8.7% and for LKIBS one was 7.6%. This data confirms that the net sales of products that reflects outsourcing from vendors' side has been growing all the time in two groups: KIBS and LKIBS. Even the downturn in the Polish economy in 2009–2013 did not impede the demand for business services.

However, despite of small differences between them, in each of the two groups of industries, there were relatively large variations in these activities (Table 1). Large, over 15% annual growth rate was recorded in activities: N78, N82, J62-63 and M70. Enterprises that engaged in other professional, scientific and technical activities posted an annual decrease of 10.2%.

Table 1. CAGR of net sales and net sales of products in business service industries between 2005 and 2013 (%)

Item	J58	J62	J63	M69	M70	M71	M73	M74	N78	N80	L68	N81	N82
Net sales	1.9	14.5	21.7	17.3	21.8	6.4	3.5	–11.1	29.3	8.0	6.0	4.8	26.4
Net sales of products	1.9	15.2	22.4	16.8	15.5	7.0	3.9	–10.2	29.2	8.0	6.1	4.4	27.2

Source: own calculations.

The analysis of the share of services' export in net sales of products has confirmed that more and more services were performed on behalf of foreign outsourcers (Figure 2).

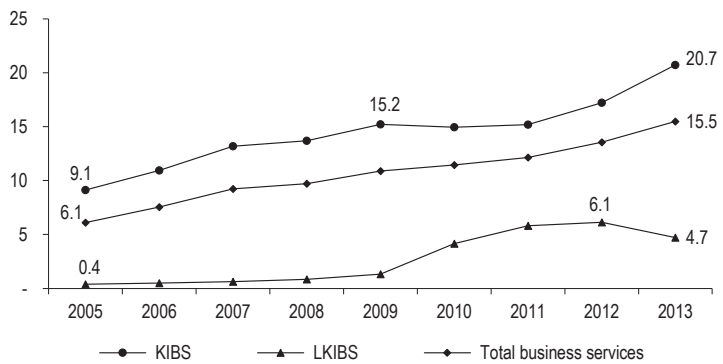

Figure 2. The share of services' export in net sales from products (%) in KIBS, LKIBS and business service industries in 2005–2013

Source: own calculations.

The KIBS industries have been exporting more and more services year after year. The share of export in net sales from products of these industries to foreign outsourcers rose from 9.1% in 2005 to 20.7% in 2013, while LKIBS rose from 0.4% in 2005 to 4.1% in 2013. Since 2009 there has also been a noticeable increase in interest in less knowledge services.

Business services industries as outsourcers in the period 2005–2013 in Poland

The increase in demand of business services, growing requirements of customers and competition between outsourcing vendors caused that they became aware of the need to concentrate on core competences and to use outsourcing in their activity in order to decrease operating costs and to meet demand of these services. For this reason they decided to outsource outside services and intermediate materials needed to produce and provide the services. Due to the specificity of business services, the dominant kind of outsourcing is service outsourcing, whose share in total outsourcing was at level of 67–85%. The popularity of this phenomenon can be measured by CAGR for the period 2005–2013. In all sectors this index for total outsourcing was at 9.3%, outsourcing services at 10.1%, material outsourcing at 5.8%. More difference in the growth rate occurred in both groups of business service. In KIBS group CAGR for total outsourcing shaped at level of 7.3%, for service outsourcing at 9.3% and for material outsourcing at 1.2%. For comparison, CAGR of both kinds of outsourcing was at level of 10.4–10.7%. However, there was a relatively large variation in the value of this indicator in service activities (Table 2).

Table 2. CAGR of outsourcing and its kinds (in constant prices) in business service industries in the period 2005–2013 (%)

Item	J58	J62	J63	M69	M70	M71	M73	M74	N78	N80	L68	N81	N82
Total outsourcing	0.4	15.9	24.7	18.1	20.9	9.8	4.6	–10.7	31.9	11.0	7.3	9.2	28.7
Service outsourcing	1.6	18.3	27.2	18.4	22.0	12.0	6.0	–10.9	34.8	13.6	6.0	7.5	32.1
Material outsourcing	–1.4	8.1	4.1	12.0	8.9	6.6	–5.5	–9.6	19.1	3.6	7.7	10.4	24.4

Source: own calculations.

Unpublished data collected by the Central Statistical Office confirmed that two kinds of outsourcing were used predominantly in activities such as: N78, N82. Enterprises from activities M70, J62, J63 used service outsourcing first of all due to their specific nature. The industries also included activities M74, M73, J58, which reordered a decrease of two kinds of outsourcing or only material outsourcing.

If we compare CAGR of outsourcing with CAGR of net sales of products, we can notice that the direction of these changes is similar. However, the growth rate of outsourcing is faster than the growth rate of net sales from products, which points at the increase of the popularity of outsourcing in production and delivery of services.

Conclusions

Outsourcing is a difficult phenomenon to measure due to lack of simple direct categories describing it. However, the choice of indirect ones allows to estimate its size, intensity, and annual growth rate.

The analysis of unpublished and collected data on net sales from products allowed to confirm that both groups: KIBS and LKIBS industries have increased continuously since 2005. This indicates that enterprises have provided more and more business services to outsourcers. Even the crisis of 2008 and downturn in the Polish economy in 2009–2013 did not impede the demand for business services. In order to meet the demand these industries outsourced more and more processes or tasks. But the growth rate of both, outsourcing and net sales, varied among the industries. These changes suggest that outsourcing has become a tool that has helped to reduce the employment growth or to escape the shortage of suitable employees, and also to maintain or to improve the

effectiveness. Hence, it is necessary to conduct further research on the impact of outsourcing on the structure of employment.

References

Amiti, M., Wei, S.J. (2005). Fear of service outsourcing: is it justified? *Economic Policy*, *20* (42), 308–347.

Bank Danych (2017). Retrieved from: https://bdl.stat.gov.pl/BDL/metadane (15.06.2017).

Business services sector in Poland (2016). Retrieved from: http://absl.pl/wp-content/uploads/2016/09/Raport_ABSL_2016_EN.pdf (20.06.2017).

Espino-Rodriguez, T.F., Padron-Robaina, V. (2006). A review of outsourcing from the resource -based view of the firm. *International Journal of Management Review*, *1* (8), 49–70.

Eurostat (2017). Retrieved from: http://ec.europa.eu/eurostat/cache/metadata/Annexes/htec_esms_an3.pdf (4.11.2017).

Falk, M., Wolfmayr, Y. (2008). Services and materials outsourcing to low-wage countries and employment: Empirical evidence from EU countries. *Structural Change and Economic Dynamics*, *1* (19), 38–52.

Feenstra, R.C., Hanson, G.H. (1999). The impact of outsourcing and high-technology capital on wages: Estimates for the United States, 1979–1990. *Quarterly Journal of Economics*, *3* (114), 907–940.

Geishecker, I., Görg, H. (2008). Winners and Losers: a Micro-level Analysis of International Outsourcing and Wages. *Canadian Journal of Economics*, *1* (41), 243–270.

Hijzen, A., Görg, H., Hine, R.C. (2005). International outsourcing and the skill structure of labour demand in the United Kingdom. *The Economic Journal*, *115* (506), 860–878.

Lewine, L. (2012). *Offshoring (or offshore outsourcing) and job loss among U.S. workers*. CRS Report for Congress. Retrieved from: https://www.fas.org/sgp/crs/misc/RL32292.pdf (20.06.2017).

Obszary tematyczne (2017). Retrieved from: http://stat.gov.pl/obszary-tematyczne/ceny-handel/handel/uslugi-biznesowe,16,1.html (10.07.2017).

Offshoring and employment: trends and impacts (2007). Paris, OECD.

Outsourcing in Europe (2017). Retrieved from: http://www.ey.com/Publication/vwLUAssets/Outsourcing_in_Europe_2013/$FILE/EY-outsourcing-survey.pdf (16.06.2017).

Wskaźniki (2017). Retrieved from: http://stat.gov.pl/wskazniki-makroekonomiczne (15.06.2017).

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ORGANIZATIONAL FICTION OF AN EDUCATIONAL INSTITUTION IN BUILDING ORGANIC LEADERSHIP – A CASE STUDY

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Abstract

This article discusses organizational fiction that is created in building a participative work environment. The statement in which the school head declares full cooperation with the teachers, considering their opinions and creating the conditions for common planning does not translate into the results of the research among the teachers. A significant difference in particular actions taken on everyday basis can be noticed. The author discusses the four styles of leadership proposed by Gayle Avery and highlights the role of organic leadership for a well-functioning educational institution in the era of changes and reforms that are introduced in education. The article was written on the basis of the results of the research that was carried out in a randomly selected public Primary School. The author aims at drawing attention to and starting a critical discussion on actions taken by school heads who create an external image of their school that differs from the reality. It leads to manipulating the public opinion about the processes occurring in a given educational institution.

Introduction

The Polish management professionals in education undergo constant transformation due to the reforms that are being introduced. It is the result of the growing self-awareness of the society and of the introduced systemic changes. The new conditions in which school heads operate allow for more flexibility and encourage them to share their power. What reinforces the ongoing process of searching for the leader of the future is the reform of

pedagogical supervision introduced in 2009 that, in a way, directs school heads to apply the participative style of leadership, consisting in including all people that make up the school community in enhancing the quality of learning processes. In order to meet the state's requirements as to the right functioning of educational institutions, it is necessary to look at the styles of leadership represented by school heads.

Gayle Avery (2004) proposed four models of leadership: classical (the school head has absolute power), transactional (the school head discusses some issues with the teachers but he or she has the last word), visionary (the school head has a particular vision and the teachers have to follow it) and organic (all members of the organization are responsible for achieving the established goals and the leader emerges from the group according to the needs). Those style permeate one another and can be complimentary, which does not alter the fact that organic leadership is the most desirable way of leading an organization in the ever-changing reality. The confirmation of this thesis can be found in the conception of a discreet leader proposed by Mintzberg (1998) that, in contemporary management, makes an organization develop faster. Creating teams and groups made up by experts and sharing power make all members of an organization feel that they belong in it and are responsible for the processes occurring in it.

Literature review

An organization is a coherent system in which changes of one element entail other changes. A system cannot be completely independent as it would not be a system then. This is why we can only speak of a degree of independence (Kieżun, 1997). The most important role is played here by the leader of a given organization, who directly influences the fulfilment of given goals. His or her actions can lead to blurring the truth and creating a fictitious image. Fiction created in an organization is then nothing but organizational pathology. It undoubtedly becomes an obstacle in achieving organizational efficiency (Kieżun, 1997). This phenomenon can be noticed in organizations where the system imposes some norms of functioning. The willingness to meet the requirements as well as possible oftentimes makes school heads engage in inappropriate actions that have a negative impact on the institution's functioning. Referring to Avery (2004), it is worth reminding that organic leadership allows for blurring the formal distinction between leaders and other members of the organization. All employees become partners in creating a better future. Leadership becomes dispersed and the knowledge of employees grows. Members of the organization are always prepared for changes on both small and large scale, which fully corresponds with the surrounding reality. All individuals that make up the organization's community develop a sense of responsibility towards themselves. It results from their personal involvement in pursuing the established goals and from their sense of duty towards the others.

Educational management is a relatively new discipline in Poland. Applying a simple transfer of methods from the general management sciences, which has dominated since 1980s, can have some impact on creating organizational fiction in educational institutions. The managerial theory focused on financial, technical, organizational and legal requirements sees success as efficiency in education functioning (Dorczak, 2016). All this oftentimes results in forgetting the real role that school has to perform for children and adolescents that attend it. It is then worth reminding that the overriding and basic role of each educational institution is to create an organization oriented towards students' learning and their development (Hattie, 2012).

Method

Every head of an educational institution follows a certain leadership style in his or her professional work. It is commonly accepted that the most appropriate style is the organic one, which includes all members in creating a common organization. To study leadership style, we have appointed the head of a randomly selected Primary School and eleven randomly selected teachers who teach in the same school as the interviewed leader. The aim was to compare what the school head says about himself and how his actions are perceived by the teachers. It should be assumed that the school head's statements would be coherent with the teachers' statements.

Results

The respondents were asked to fill in the questionnaire of the survey containing 15 closed questions prepared for the purposes of this research. The questions concerned key characteristics of a leader, the main role that he or she should perform in an educational institution and ways of sharing power. In the gathered material, there are 15 answers from the school head and 165 answers from the teachers. The results of the research present the leadership style represented by the head of the primary school (Table 1) in subjective opinions of the respondents.

Table 1. Leadership style represented by the school head in the opinions of the surveyed school head and the teachers who work with him (%)

Surveyed respondents and their opinions	Classical leadership	Transactional leadership	Visionary leadership	Organic leadership
School head	13.33	20.00	13.33	**53.00**
Teachers	**49.69**	24.24	7.27	18.78

Source: own elaboration.

Analysing the result of the survey, we can note that the school head perceives his actions taken for the institution as organic leadership, while the teachers who work with him every day state quite the opposite. In 49.69% they state that the leadership style of their school head is classical. The reason for this situation may be that the school head idealizes himself and lacks the ability to rationally look into his own activity.

The tables below present the detailed results of the survey gathered from the school head and his employees.

Table 2. Answers given by the school head and the teachers to question 1.

Possible answers	School head What key characteristics should a leader have?		Teachers What key characteristics does your present school head have?	
	n	%	n	%
Strong character, firm, decided, opinionated	0	0	6	**54.54**
Communicative, able to influence people	0	0	5	45.45
Creative, unconventional, seeking for new solutions, inspiring	0	0	0	0
Open, knows the people, stimulating others to act, supportive	1	**100.00**	0	0
Total	1	100.00	11	100.00

Source: own elaboration.

From the data presented above we can conclude that the school head sees himself as an open person who knows very well the people he works with and gladly stimulates them to act supporting all ideas. The teachers have a different opinion as they say that their employer is firm and decided, has a strong character and hold stubbornly to his own opinions. This result presents organizational fiction that can induce chaos in the right way of functioning of an educational institution.

Table 3. Answers given by the school head and the teachers to question 2.

Possible answers	School head What should be the main role performed by a leader?		Teachers What is the main role performed by the head of the school that you work in?	
	n	%	n	%
Decisive	1	**100.00**	9	**81.81**
Negotiator	0	0	1	9.09
Creator	0	0	1	9.09
Supporting others	0	0	0	0
Total	1	100.00	11	100.00

Source: own elaboration.

The results obtained in the second question show unanimity among the teachers and the school head. Most of them agree that the present school head is the one who has the casting vote. This result goes along with classical leadership where strict obedience plays the most important role in creating the organization.

Table 4. Answers given by the school head and the teachers to question 3.

Possible answers	School head What main tasks/action should the leader perform?		Teachers What main tasks/action does the present head of your school perform?	
	n	%	n	%
Making sure that everybody acts according to the assigned duties	0	0	8	**72.72**
Communicating with people and negotiating on the directions of action	0	0	2	18.18
Searching for new solutions	0	0	0	0
Creating conditions for operation and development for people and teams	1	**100.00**	1	9.09
Total	1	100.00	11	100.00

Source: own elaboration.

Analysing the results obtained in question 3, we can notice another significant difference in the perception of the school head's role. Most of the teachers – 72.72% believe that their school head makes sure that each of them acts according to the assigned tasks, which translates into classical leadership style. Whereas, the school head believes quite the opposite. He is convinced that he creates friendly conditions for his employees to act and develop, which serves organic leadership.

Table 5. Answers given by the school head and the teachers to question 4.

Possible answers	School head		Teachers	
	How, as the school head, do you distribute tasks?		How does the school head distribute tasks?	
	n	%	n	%
The school head assigns tasks	0	0	6	**54.54**
The school head negotiates task distribution	0	0	3	27.27
The school head inspires others and makes them follow his ideas	1	**100.00**	1	9.09
The school head gives the opportunity for others to find themselves and choose their tasks	0	0	1	9.09
Total	1	100.00	11	100.00

Source: own elaboration.

The results from question 4 confirm the classical leadership style, with which the school head disagrees. He believes that he inspires others and makes them follow his ideas. That kind of actions characterizes visionary leadership.

Table 6. Answers given by the school head and the teachers to question 5.

Possible answers	School head		Teachers	
	What strategy do you, as the school head, apply while setting goals and planning work?		What strategy does the school head apply while setting goals and planning work?	
	n	%	n	%
The school head precisely sets the goals and the plan of action	0	0	6	**54.54**
Goals and a detailed plan are set commonly through negotiations	0	0	2	18.18
The school headsets creative goals and plans that are attractive for others	0	0	0	0
The school head creates the conditions for everybody to influence their goals and work plans	1	**100.00**	3	27.27
Total	1	100.00	11	100.00

Source: own elaboration.

The answers presented in question 5 show contradictory interpretations of the school head's actions, which causes the creation of organizational fiction. The school head is convinced that every employee has the opportunity to influence the goals and plans of the institutions. Most of the teachers – 54.54% believe the opposite though. They say that the school headsets the goals and plans of action, which undoubtedly is characteristic for classical leadership.

The results of the survey presented in Table 7 again show some discrepancy between what the school head declares and what the teachers believe. The school's leader claims that he builds the team basing on his knowledge of his employees and their strengths and weaknesses, whereas 72.72% of the surveyed teachers say that the school head appoints teachers to given tasks or teams himself. Yet again we can notice here some elements that may create organizational fiction.

Table 7. Answers given by the school head and the teachers to question 6.

Possible answers	School head What processes should occur in school while building a team and assigning tasks to its members?		Teachers What processes do occur in school while building a team and assigning tasks to its members?	
	n	%	n	%
The school head appoints people to the team and assigns tasks to them	0	0	8	**72.72**
Teams membership and tasks distribution is agreed on through negotiations	0	0	1	9.09
The teams and task distribution are set spontaneously, following the school head's ideas	0	0	0	0
The teams are created basing on the knowledge of people and their strengths/weaknesses	1	**100.00**	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

Table 8. Answers given by the school head and the teachers to question 7.

Possible answers	School head What methods of work are appreciated the most?		Teachers What methods of work are appreciated the most in the school that you work in?	
	n	%	n	%
Individual work	0	0	2	18.18
Team work with clearly established tasks and responsibilities	0	0	3	27.27
Various, according to ideas and the needs of the moment	1	0	5	**45.45**
Adapted to the needs of the moment and to people's predispositions	0	**100.00**	1	9.09
Total	1	100.00	11	100.00

Source: own elaboration.

The obtained information on methods of work show agreement between the teachers and the school head. They all referred to visionary leadership style, in which the school head appreciated various methods and techniques of work according to ideas and the needs of the moment.

Table 9. Answers given by the school head and the teachers to question 8.

Possible answers	School head What are the sources of the leader's authority?		Teachers What are the sources of authority of the head of your school?	
	n	%	n	%
The school head's formal position	0	0	7	**63.63**
The school head's high level of interpersonal abilities	0	0	1	9.09
The school head's creative mind	0	0	1	9.09
The school head's ability to form relationships with people	1	**100.00**	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

The data concerning the sources of authority again show some discrepancy creating organizational fiction. The school head claims that he has the ability to form relationships with people. The teachers are of a different opinion. 63.63% of the respondents claim that the school head has a formal position, which goes along with classical leadership.

Table 10. Answers given by the school head and the teachers to question 9.

Possible answers	School head How are decisions made in the school?		Teachers How are decisions made in the school?	
	n	%	n	%
Decisions are always or almost always made by the school head	0	0	7	**63.63**
Decisions are made by consensus	0	0	2	18.18
Decisions are clearly the manifestation of the school head's creative ideas	0	0	0	0
Decisions are made by those who are responsible for the task	1	**100.00**	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

Another example of creating organizational fiction can be found in the results of question 9. The school head says that decisions are made by those who are responsible for a given task, which characterizes organic leadership. The teachers have a different opinion and 63.63% of them claim the decisions are always or almost always made by the school head. That way of decision making is typical for classical leadership.

Table 11. Answers given by the school head and the teachers to question 10.

Possible answers	School head What methods are used in the school in solving conflicts?		Teachers What methods are used in the school in solving conflicts?	
	n	%	n	%
The school head is the most important institution that solves conflicts	0	0	2	18.18
Conflicts are solved by negotiations between the sides	1	**100.00**	8	**72.72**
The school head usually has the best ideas for solving conflicts	0	0	0	0
Conflicts are an occasion to learn	0	0	1	9.09
Total	1	100.00	11	100.00

Source: own elaboration.

The data presented in Table 11 shows coherence between the teachers' (72.72%) and the school head's opinions concerning the methods used in solving conflicts. The respondents agree in referring to transactional leadership.

The data concerning the strategies applied in difficult situations or crises again shows a significant discrepancy that may contribute to creating organizational fiction. The school head is convinced that all members of the organization contribute to solving the problem. This way of thinking is not reflected in the teachers' opinion. 45.45% of them believe that in urgencies it is the school head who takes the reins.

Table 12. Answers given by the school head and the teachers to question 11.

Possible answers	School head What strategies are applied in the school in difficult situations or crises?		Teachers What strategies are applied in the school in difficult situations or crises?	
	n	%	n	%
In urgencies the school head takes the reins	0	0	5	**45.45**
In urgencies actions are taken according to the established role distribution in the school	0	0	4	36.36
The school heads copes with urgencies the best	0	0	0	0
In urgencies everyone contributes to the solution	1	**100.00**	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

Table 13. Answers given by the school head and the teachers to question 12.

Possible answers	School head How are changes introduced in the school of which you are the head?		Teachers How are changes introduced in the school in which you work?	
	n	%	n	%
Ideas for change come from the school head and he decides whether they are introduced	0	0	3	27.27
Ideas for change are negotiated on in the team	1	**100.00**	4	**36.36**
The school head is usually right in fact	0	0	0	0
Changes are a constant element of work and team development	0	0	4	**36.36**
Total	1	100.00	11	100.00

Source: own elaboration.

Analysing the answers to question 12, we can see that the school declares that all ideas for change are negotiated on in the team. The teachers share that opinion and, in addition, claim that changes are a constant element of work and team development. The results indicate that transactional and organic leadership permeate here.

Table 14. Answers given by the school head and the teachers to question 13.

Possible answers	School head How is the process of information management organized in the school?		Teachers How is the process of information management organized in the school?	
	n	%	n	%
The information flow is controlled by the school head	0	0	4	**36.36**
Information is transferred according to the formally established teams and rules	0	0	2	18.18
The school head informs about his ideas on a regular basis	0	0	3	27.27
The school head creates the conditions for everyone to speak their mind and access information	1	**100.00**	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

The obtained information presented in Table 14 again proves that there is some discrepancy between what the school head declares and what the teachers say. 36.36% of the school's employees indicate that the school head is a classical leader as he controls the information flow. Whereas, the school head sees himself as an organic leader, as he claims that everybody has the opportunity to speak their mind and access information.

Table 15. Answers given by the school head and the teachers to question 14.

Possible answers	School head		Teachers	
	How is the cooperation between the school and its external environment agreed on?		How is the cooperation between the school and its external environment agreed on?	
	n	%	n	%
The school head decides as to with whom the school cooperates himself	0	0	2	18.18
The rules of the school's cooperation with external organizations are clearly established	1	**100.00**	0	0
Most often it is the school head who has ideas concerning how and with whom the school should cooperate	0	0	1	9.09
Cooperation is started according to the needs of the people and the team	0	0	8	**72.72**
Total	1	100.00	11	100.00

Source: own elaboration.

The answers obtained in question 14 again demonstrate the lack of coherence. 72.72% of the teachers believe that the school head starts cooperation with the local environment according to the needs of the people and the team, which indicated organic leadership. The school head sees himself as a transactional leader in that aspect, as he claims that cooperation with the local environment is clearly established.

Table 16. Answers given by the school head and the teachers to question 15.

Possible answers	School head		Teachers	
	How is work assessment/evaluation carried out in the school?		How is work assessment/evaluation carried out in the school?	
	n	%	n	%
The school head assesses others and their actions himself.	1	**100.00**	7	**63.63**
The rules of assessing people and actions are agreed on with the team.	0	0	2	18.18
Assessment is carried out spontaneously in the course of work.	0	0	0	0
The main way of assessing people and their work is their self-assessment and evaluation of their own work.	0	0	2	18.18
Total	1	100.00	11	100.00

Source: own elaboration.

Analysing the last question in the survey's questionnaire, we can see that the school head and most of the teachers agree that the leader assesses others himself. That type of action is typical for classical leadership.

The analysis of the data presented in the tables shows that in five cases the school head's answers were coherent with what the teachers who work in the same school stated. Unfortunately in as many as nine questions the school head did not give the same answer as the teachers (Figure 1).

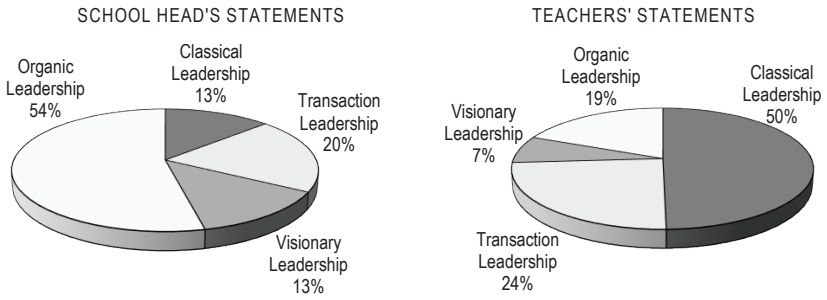

Figure 1. Coherence of statements concerning the same aspect among the school head and the teachers who work in the same educational institution

Source: own elaboration.

Conclusions

The aim of this study was to present the results of the research concerning creating organizational fiction in building a participative work environment. The material gathered in the research and the conducted analyses show that the head of a randomly selected Primary School who took part in the study in 54% sees his actions as fostering organic leadership. Only 13% of his decisions refer to classical leadership. These statements are not reflected in the interviews conducted among teachers. 50% of the respondents declare that the school head with whom they work organizes his actions within classical leadership paradigm, 24% believe that transactional leadership is the dominant style, 19% claim that the school head represents organic leadership and 7% refer to visionary leadership.

The discrepancies observed in the research may have a negative impact on creating unanimity in pursuing the established goals. Oftentimes it may lead to a struggle between the truth and fiction concerning a given school's functioning. All process that contain contradictions are an impulse for continuous development. Kieżun (1997) points out that complete agreement and unanimity may prove dangerous as they may be a result of passivity. However, it does not alter the fact that the school head should look into his or her actions, bearing in mind that it influences the functioning and involvement of other members who make up the school organization.

References

Avery, G. (2004). *Understanding Leadership. Paradigms and Cases*. Thousand Oaks–New Delhi: Sage Publications.

Dorczak, R. (2016). Sposób rozumienia przez nauczycieli podstawowych wartości edukacyjnych a rzeczywistość współczesnej szkoły. In: R. Dorczak (ed.), *Wybrane aspekty zarządzania i przywództwa edukacyjnego* (pp. 7–16). Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Hattie, J. (2012). *Visible Learning for teachers. Maximizing Impact on Learning*. London and New York: Routledge.

Mintzberg, H. (1998). Covert Leadership: Notes on Managing Professionals. *Harvard Business Review*, *6* (76), 140–147.

Kieżun, W. (1997). *Sprawne zarządzanie organizacją*. Warszawa: Oficyna Wydawnicza SGH.

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THE LOW – BUDGETING CONCEPT OF BACKPACKING

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Abstract

Low-budgeting is one of the most important pillars of backpacking. It is considered to be the primary determinant of this type of travel. Because the cheapness, economic efficiency of spending money, the calculation of expenditure, determines the practical dimension of this type of tourism. It allows to take trips to the most distant regions of the world, to all those (especially young people) who do not have sufficient financial backing, to benefit from the offers of tour operators. Hereby a part of the scientific community understand the low-budgeting and see a specific financial backpacker's tactics in it. Others, in turn, notice more and more widespread loosening of budgetary discipline among backpackers, their free approach to economic issues and not limiting travel expenses. To describe the concept of low-budgeting in backpacking, to understand its essence and determinants, the survey was conducted in 2015/2016. The study involved 100 respondents between 22 and 35 years old who identify with backpacking and did at least one such a trip. The socio-economic issues of backpackers ' travel, material backpackers' compensation and the economic motives of the trips they undertook were analysed.

Introduction

It is acknowledged that the low financial outlay for a trip is a pillar of backpacking, as are three others: independent of the tourism industry and self-sufficient way of planning and executing the journey, as well as deciding the direction of the expeditions (Pearce, 1990, 2006; Cohen, 2004; Pearce, Murphy, Brymer, 2009). In Australia this type of travel is included in the international budget tourism sector [sub-sector of international budget tourism]

(Hampton, 1996, 1998) justifying that it is characterized by the choice of travel practices that favour and enable the preservation of low-budget discipline. "Backpackers – as recorded in the development strategy of one of Australia's administrative regions – are less susceptible to fluctuations in the economy and more flexible in the face of the economic challenges of the world" (Backpacker tourism action plan 2009, p. 2). The backpackers themselves admit that "they can sleepover in most countries of the world for less than 10 polish zloty or even for free (...). They eat what the natives (...). They usually use local communication, hitchhiking or on their own feet. Most backpackers follow the rule that they will eat and sleep well at home" (Sachno, 2008, p. 56). The cheapness is the particular advantage of this style of tourism (Jabłonkowska, 2016; 2017). However, as Dłużewska remarks (2004, p. 27; 2007), backpacking should not to be confused with the Tatra mountain hiking, nor with the lack of money. Traveling with a backpack is not vagabonding "in most cases" – explain Patyra and Dłużewska (2015, p. 44) – "is not due to poverty, but to the chosen philosophy of travelling".

In recent years, the backpackers' society has been promoting the loosening of low-budget discipline. Many backpackers do not limit travel expenses, especially if they are directly linked to their need of experiencing and learning. They think that when they come to a place, they should take full advantage of the opportunities offered to them. So they are ready to pay almost any price for services that will enable them to fulfil their desires (Grygiel, 2010).

So how to interpret low-budgeting in backpacking? What practices fit into the financial backpackers' tactics? In order to answer these questions, there was conducted the study of socio-economic conditions of backpackers' travel, their material salaries and the economic motives of their trips were analysed. The survey, conducted from November 2015 to February 2016[1], involved persons who identified themselves as backpackers and had at least one expedition in this type of travel. There were 100 persons (41% male, 59% female). The median age of the respondents was 25 years (the youngest was 22 years, the oldest was 35 years), 41% of the respondents were unemployed, 35% declared informal relations, 17% married, and 7% were divorced or widowed (widowers). The respondents were mainly from cities (76%), had higher education (42%) or medium (34%), after vocational school there were only 23% of people, and elementary – 1%. 65% of surveyed backpackers carried out more than 4 backpackers' journeys; almost every fifth respondent had 2–4 expeditions, and for 14% backpackers such a trip was a one-time experience. The survey was used asking about the socio-economic conditions of the backpackers' trips (related to the preparation and execution of the trip, sources of its funding, the work undertaken during the expedition).

The financial conditions of backpackers

The material background of the surveyed backpackers (Figure 1) does not allow for an unequivocal conclusion about their poor financial condition. Over half of them (66%) rated their financial situation as good (51%) and even very good (15%). Only 28% – as average and only 6% – as insufficient.

[1] The research was carried out by Marta Cieplicka, a student of West Pomeranian University in Szczecin, unpublished master's thesis: Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects, thesis supervisor prof. B. Stankiewicz. Assistant thesis supervisor dr Jolanta B. Jabłonkowska.

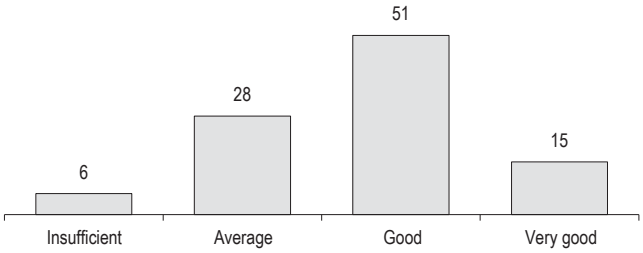

Figure 1. The financial evaluation of respondents (%)

Source: own compilation based on M. Cieplicka, Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects (unpublished master's thesis).

Backpacking – as the data indicate – do not choose people with small financial resources. Such situations are rare and concern only 6% of the examined backpackers (their material conditions – in their opinion – are inadequate). For the most part, however, the choice of low-budget travel is the result of their voluntary choice. It's a skill. "Cheap Travel (...) – it is style, fashion, not necessity. Backpackers are generally well-off people, can afford airplanes and appropriate clothing – warm Gore-Tex jackets, special cotton underwear that does not soak. And also gadgets like self-contained mattresses or water bottles, adjusting to the shape of the free space in the backpack" (Więcka, 2002, p. 78).

The "cheap" travel organization skill goes beyond the simplistic concept of low-budget tourism. You have to have a certain amount of financial resources to be able to afford to meet your travel needs. The expenses associated with backpacking travel are in many cases far higher than those incurred by so-called mass tourists (Loker-Murphy, Pearce, 1995; Newlands, 2004; Hannam, Diekmann, 2010). Backpackers are consumers (like the mass tourists) of tourist and recreational attractions that require some financial independence and wealth (Shields, 1992; Cooper, O'Mahony, Erfurt, 2004). But with the difference in terms of institutionalized tourists, they do not consume ready packages, but they make their own decisions about financing their next stages of travel according to their individual expectations, associated with experiencing pleasure, time and economic capabilities.

Many researchers believe that, backpackers travel on a low budget, with strict spending limits. They choose cheap accommodation, cheap means of transport, inexpensive ways of eating, etc. Therefore, they are suggested to be called "budget travelers" (O'Reilly, 2006, p. 1005–1006). In order to check the amount spent on travel, the respondents were asked about the average expenses they incurred during the week. The respondents marked their declarations using scales of answers containing quota ranges.

The analysis of the expenses that the respondents incurred during the trip indicates that when they arrive at the destination they do not limit their expenditures. 37% of them spent 250–500 zł in the destination within a week; 31% – over 501 zł (some even above 1,000 zł), whereas the minimum spending, not exceeding 250 zł, was declared by 32% of respondents (Figure 2).

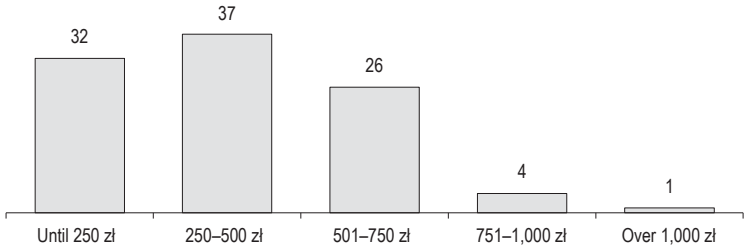

Figure 2. The range of weekly expenses during travel (%)

Source: own compilation based on M. Cieplicka, Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects (unpublished master's thesis).

The most amount of money backpackers spend on food. Figure 3 shows the structure of expenditure incurred by respondents during their departure. The living needs significantly outweighed the costs: food purchases (100% of indications). Not every respondent used the available accommodation facilities, so the fees related to accommodation indicated 67% of the respondents. The separate expenditure group included needs of cognitive nature: related to cognition and experiencing (purchase of admission tickets for tourist and recreation attractions – 47%). The lowest was the amount spent on the use of alcohol and cigarettes, declared by only 7% of respondents.

The above declarations indicate that expenditure related to the implementation of backpackers' travel is not low, which seems to deny universal opinion about the "cheapness" of backpackers travel. The effect of this apparent discrepancy is probably the specifics of this type of trip and the nature of the backpackers themselves. Therefore, caution should be kept when formulating final conclusions about the economic backpacking conditions and consider the issue of expenditure flexible.

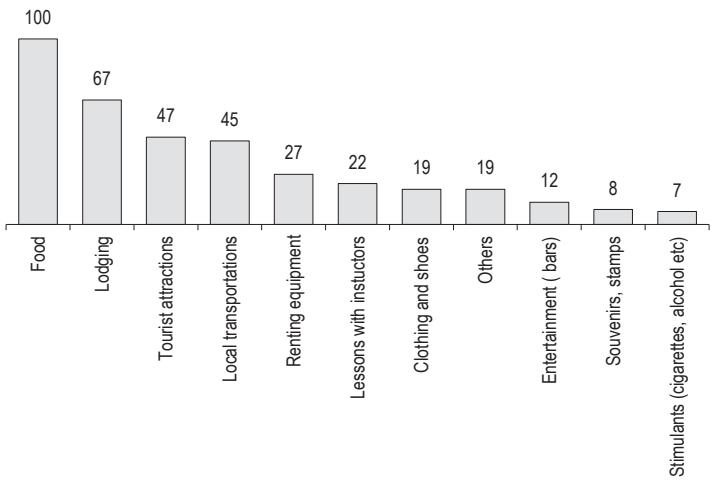

Figure 3. Backpackers expenses (%)

Source: own compilation based on M. Cieplicka, Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects (unpublished master's thesis).

Issues related to the financing of backpacking trips are also important. The respondents were asked about ways to raise money for their backpacking trip (Figure 4).

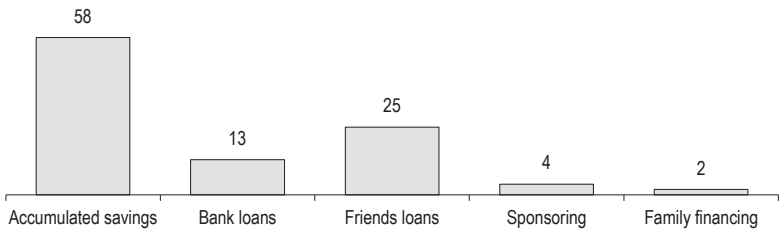

Figure 4. The financing sources of trips (%)

Source: own compilation based on M. Cieplicka, Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects (unpublished master's thesis).

Respondents pointed out that their trips are mainly funded by pre-existing savings (58%). Every 4 people borrow from family or friends. Some benefit from the help of institutions (13%), even less from sponsorship.

Respondents were also asked about the forms of taking up employment while traveling. 28% of respondents said that part of their time spent on work to finance their own trip. Among the answers about the specifics of the work done there were examples of: mobile jobs in the IT industry (13%); playing musical instruments (5%); letting soap bubbles in the streets (6%); temporary and short-term work on the farm (4%).

The knowledge of the economic backpackers' salaries was supplemented by information on the market value of the equipment they carry with them (Table 1). The warrantor of securing the many needs of backpackers is good quality equipment. The price of equipment that they take with them depends to a large extent on the materials they are made from, the quality, the weather and damage resistance. The question about the money sources the respondents spend on the equipment would not reflect their financial capacity to prepare a low budget trip, but to indicate what resources they use on the various elements of their backpacking allowance and also – what is their special value in choosing the equipment. Basic equipment is the cost of approximate 1640 zł. Converted into average expenditure on travel, assuming that equipment is exploited on average in 5 years – basic equipment represents 13.32% of the average amount spent on a given trip.

Table 1. The money the respondents are willing to spend on a given item of equipment

Equipment	Financial value of equipment (zł)				
	0–200	200–500	500–1,000	1,000–1,500	Over 1,500
Shoes	28	43	26	3	0
Backpack	30	41	19	10	0
Tent	19	35	29	15	2
Sleeping bag	43	27	24	6	0
Digital camera	0	0	14	39	47
Video camera	0	5	24	55	16
Electronic book reader	38	41	19	2	0

Source: own compilation based on M. Cieplicka, Backpacking as a form of practicing contemporary tourism among people aged 20–35 together with socio-economic aspects (unpublished master's thesis).

The respondents spend most on electronic equipment, obtaining good cameras and cameras, spending the least on a sleeping bag.

The most significant factor in selecting the items is the price, although the respondents also pay attention to other criteria. The quality, weight and opinion of other users are also important. The origin of the product took fifth place on the scale. However, the brand and fashion are of little importance.

Economic motives of taking up backpacking

Respondents were asked about their motivations to choose backpacking (as a consciously approved form of travel) and the preferences of the places they visited. The answers to the question concerning the first part were related in many cases to low-budgeting. 19% of respondents opt for backpacking because of low travel costs, 27% due to their limited budget. But the motives associated with economics were not the most numerous. The social aspects of tourism were more important. For 36% of respondents, the preparation of such a trip involved the pleasure of self-organization and personal design of the way to spend free time; for 39% – with satisfaction resulting from coping with difficult conditions; for 29% – with the need of meeting new people from different parts of the world and from different cultures; for 25% – spending an unlimited amount of time at a particular place according to personal design. In the other categories were as follows: “no one except me has my time”, “I decide for myself” (25 points); “I develop my personality”, “I develop different skills and broaden my horizons, which will be useful in my personal and professional life” (17 references); “A good way to learn foreign languages” (31 references). The respondents also pointed out (these were individual answers – 4%) on: the educational aspect of backpackers’ travel, the temporary possibility of getting rid of daily duties, lack of interest in other forms of tourism.

The analysis of the countries, the examined backpackers visited during their backpacking trips, also does not allow concluding on the economic basis of these choices. Among the most popular European countries were Croatia and Montenegro (64%); Albania, Bosnia and Herzegovina (51%), Romania, Bulgaria, Moldova (49%), France, Monaco (43%), Greece, Macedonia (41%), Belgium, the Netherlands, Denmark, Luxembourg (32%), Kosovo, Serbia (31%), Italy (27%), Austria, Germany, Liechtenstein (19%), Turkey (15%), Malta (10%), Belarus, Ukraine (10%), Russia (7%). Among the Asian countries, there were indications of Georgia (24%), India (13%), China (9%), Vietnam (9%), Cambodia (7%), Laos (3%), Nepal (2%), Thailand (1%), Japan (1%). From the North America: the United States (7%), Canada (4%), Mexico (4%), Panama (2%), Cuba (1%), Costa Rica (1%). In South America, it was Bolivia (3%), Venezuela (2%), Brazil (1%). In Africa, respondents travelled to Morocco (8%), Egypt (3%), Zimbabwe (1%), Cameroon (1%). In Australia and New Zealand, one respondent indicated his travel presence at this place.

The catalogue of indicated countries does not reflect any economic regularity. You cannot find in these choices the differences between the rich and the poor. The respondents visited both the countries of the economic prosperity as well as the ones which are in the process of achieving this goal. It can also be noted, however, that European countries dominate as well as former socialist countries.

Conclusions

Backpacking appears as an intrinsic activity in the philosophy of life, which has its roots in both the stage of human life and its materialistic side. Although low cost travel arrangements for most backpackers seem to be part of their conscious choice and style of spending their leisure time, rather than the necessity of their overall bad financial situation.

Backpacking is a type of tourism which fits more in with social relationships than in economic algorithms. Low budgeting should be understood as an orientation on "cheapness" stemming from the desire to impose budgetary rigor to spend according to "personal" needs, most often in the reverse to mass tourism: the least money spent on the basic needs of life functions and much more for higher needs – self-fulfillment needs : promoting personal development, strengthening self-esteem, improving physical and mental health, developing economic, political and historical knowledge and practical skills useful in private and professional life. If there are no funds to continue the trip then backpackers undertake part – time jobs.

References

Backpacker tourism action plan 2009–2013 (2009). Melbourne: The Victorian Government.

Cohen, E. (2004). Backpacking: Diversity and change. In: G. Richards, J. Wilson (eds.), *The global nomad: backpacker travel in theory and practice* (pp. 44–46). Clevedon: Channel View Publications.

Cooper, M., O'Mahony, K., Erfurt, P. (2004). Backpackers: Nomads join the mainstream? An analysis of backpacker employment on the 'harvest trail circuit' in Australia. In: G. Richards, J. Wilson (eds.), *The global nomad: Backpacker travel in theory and practice* (pp. 180–195). Clevedon: Channel View Publications.

Dłużewska, A. (2004). Bag Packers czyli ludzie z plecakiem. *Biznes i Turystyka*, *25*, 26–32.

Dłużewska, A. (2007). Backpckers: New Nomads or Escapists? In: C. Geoffrey, R. Sibley (eds.), *Going abroad: travel, tourism, migration. Cross – Cultural Perspectives on Mobility* (pp. 167–176). Newcastle: Cambridge Scholars Publishing.

Grygiel, M. (2010). Sustainable Backpacking: Understanding the Ecological and Cultural Footprint of Backpackers in the Byron Bay Community. Villanova: Villanova University.

Hampton, M.P. (1996). Economic Development Impacts of Backpacker Tourism in the Periphery: A Case Study of Lombok. Portsmouth: University of Portsmouth, Department of Economics.

Hampton, M.P. (1998). Backpacker tourism and economic development. *Annals of Tourism Research*, *3* (25), 639–660.

Hannam, K., Diekmann, A. (eds.) (2010). *Beyond Backpacker Tourism: Mobilities and Experiences*. Bristol UK: Channel View Publications.

Jabłonkowska, J.B. (2016). Tożsamość współczesnego backpackera – między kontrkulturowością a indywidualizmem. *Ekonomiczne Problemy Turystyki*, *1* (33), 273–286.

Jabłonkowska, J.B. (2017). *Backpackerzy polscy a zagraniczni. Wieloaspektowe studium porównawcze*. Wrocław: AWF we Wrocławiu.

Loker-Murphy, L., Pearce, P. (1995). Young Budget Travelers: Backpackers in Australia. *Annals of Tourism Research*, *4* (22), 819–843.

Newlands, K. (2004). Setting out on the road less travelled: A study of backpacker travel in New Zealand. In: G. Richards, J. Wilson (eds.), *Global Nomad. Backpacker Travel in Theory and Practice* (pp. 217–236). Clevedon: Channel View.

O'Reilly, C.C. (2006). From Drifter to Gap Year Tourist: Mainstreaming Backpacker Travel. *Annals of Tourism Research*, *4* (33), 998–1017.

Patyra, A., Dłużewska, A. (2015). Backpacking – historia, ramy, rozwój. *Turystyka Kulturowa*, *11*, 40–54.

Pearce, P.L. (1990). *The Backpacker Phenomenon: Prelimunary Answers to Basic Questions*. Townsville: James Cook University of North Queensland.

Pearce, P.L. (2006). Backpackers and backpacking – a fresh look. *Tourism Recreation Research*, *3* (31), 53–59.

Pearce, P.L., Murphy, L., Brymer, E. (2009). Evolution of the backpacker market and the potential for Australian tourism. Sustainable Tourism Pty Ltd, Gold Coast, Queensland.

Sachno, S. (2008). Następcy Marco Polo. Jak za tysiąc euro dotrzeć na koniec świata. *Wprost*, *31*, 56–59.

Shields, R. (ed.) (1992). Spaces for the subject of consumption. In: R. Shields (ed.), *Lifestyle shopping: The subject of consumption* (pp. 1–20). London: Routledge.

Więcka, A. (2002). Na własnych nogach na koniec świata. *Newsweek Polska*, *3*, 76–80.

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SOCIALLY RESPONSIBLE LOGISTICS IN OF PUBLIC SERVICES' AREA

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Abstract

In this article the issues of social responsibility and necessity of its implementation in public sector have been taken on. We've tried to answer the question: what criteria should be taken into account in bargaining procedures so public task could be completed concordantly with social responsibility rules and in what way logistic can support completing public tasks. It's been said that main criteria consist of ecological and social aspects influencing for example improvement of quality of life, solving of social issues and abiding law by executors. Moreover we came to the conclusion that logistic area with its coordinating function is the most predestine for giving public services.

Introduction

Meaning of social responsibility and economical aspects is constantly growing. More and more often it is a basis of building mutual trust and transparent relationships between external and internal buyers. Nowadays being socially and responsibly active should occur among not only economic units, but also public sector

ones,[1] to which social responsibility is a main goal. It is a consequence to a community, entered in essence of its functioning. Any tasks completed through public services have a function to satisfy social or local needs (Tribunal of Constitution, 1994, pp. 191–200). That's why it can seem like the public sector should be socially responsible and it does not has to undertake additional and very expensive activities to prove that fact.

However from the concept of country that guarantees responsibility for delivering mutual good with synchronic resignation from independent performance of public tasks says that. National services don't have to or even should not complete all of the tasks independently. As a natural consequence of higher mentioned data is commitment private sector in implementation of public tasks as tender procedures. Main meaning is transcribed to expenses so social and environmental aspects are neglected. It is happening even though European Union guidelines[2] and amendment of acts about law of public orders in membership countries. Then the questions are created:

- what criterion should be made in accordance with rules of social responsibility of public orders to make choice of the best solution possible,
- in what way responsible Logistics can support completing public tasks.

Those questions are a starting point of consideration of these assumptions, and its goal is to show dependencies in implementing social responsibility in area of public services logistics.[3]

Validity of implementation of concept CSR in public sector

Concordantly with The European Union green paper CSR is a concept of voluntary consideration of social and ecological aspects in directing commercial actions and contacts with surroundings (Green Paper…, 2008). Its implementation lets to improve competitiveness in area of expenses and financial productivity, it helps to increase effectiveness of using human capability, is an engine of innovation, simplifies management of risk and improves image of the company in customers sight (Communication…, 2008).

The concept of „Corporate Social Responsibility" shows that it is a concept addressed to economical units. Adjective „Corporate", because of its entrepreneurial connotation, from public sector point of view, doesn't seem to be very adequate. It results from a goal, which is to guarantee correct functioning of society. Without existing public sector, social services would be offered on unsatisfactory level in area of quantity, quality and price. This assumption excludes economic activity, which may be leader only if it finds explanations in social goals. However ineffectiveness of public sector leaded to change the ways of thinking and managing. They deployed concept of New Public Management, which means to commercialize public sector and managers way to managing it. This means that this sector has its business rules. Enterprising character can be seen in responsibility for good and effective delivery of services which means creating their availability and openness and low cost of delivering them (Wodecka-Hyjek, 2008, p. 247). It seems to explain necessity to implementation of CSR public sector.

Social responsible actions are used to legitimization of society, and main goal of CSR is showing that any entrepreneurial actions, in ethical, social and ecological aspect ale useful for society and their production is

[1] Through the public sector we understand local government units and other public benefit organizations.

[2] In 2005, the European Commission published a handbook highlighting the need to integrate sustainable development into public procurement, and in 2008 Sustainable Consumption and Production and Sustainable Industrial Policy which contains the necessary guidelines to help reduce the pressure of the economy and society on the environment.

[3] Public service logistics is understood as temporal-spatial transformation of goods related to the realization of public tasks. Logistics is also an important part of cross-sectoral coordination (private, public and non-governmental sectors) (Kauf, 2014, p. 46).

responsible (Kuhlen, 2005, p. V). Knowing that we should say that actions helping to deliver values to buyers in responsible way should be leader by those units which feel the lack of legitimization. For public organizations, social responsibility is a main goal, which make them have democratic card. So we can't say they don't have social card. Possible lack in this area come from deficit of communication. If it is like that then we should ask a question: why implementation of the Social Responsibility concept is necessary to public sector? The answer seems to be easy. Public sector is quitting independent implementation of public tasks more and more often. It is giving its entrepreneurship to private units in which legitimization deficit can be bigger. Some aspects can be worrying for example conditions of work which in case of realization of tasks by external units can get worse and lead to dissatisfaction and objection of society. That is why decisions of public sector units about choosing external contractor should be addicted to for example consequences for labor and quality of provided services (Amirkhanyan, Kim, Lambright, 2007, p. 703).

Connections of public sector with economical one are pointing the necessity to create affiliate multisector relationships. Only then cooperation will elaborate, giving satisfaction to both sides and advantages to local societies. This direction is recommended by World Business Council for Sustainable Development in document „Vision 2050. The new agenda for business". They pointed what actions should be taken into account to until 2050 „around 9 billion people live well, and within the limits of the planet". In the document it was emphasized that an important factor determining balanced development is cooperation between sectors, consisting of mutual decision making and mutual responsibility for taken actions in all involved units. In this context correctly understood Corporate Social Responsibility can help with completing public tasks.

In harmony with data above public sector should be responsible for creating conditions of effective abiding the law, following the procedures, preventing corruption and make ethical actions common. In the matter of social and environmental responsibility, public sector also fulfills part of middleman between business world and society. Its actions in this area should concentrate on creating good conditions to choose by economical units (and not only) voluntary commitment for balanced development. Main goal of a public sector i also providing effective coordination of actions in this area and creating a platform to exchange knowledge and experiences. As a consequence we can highlight four main functions, which public sector can make in relation to Social Responsibility Concept (Tenta--Skwiercz, 2009, p. 111):

- educational – promoting concept of CSR,
- coordination– supporting structuring and negotiating programs of CSR,
- motivational – making it common to give incentives to representatives of economic area to taking social responsible actions,
- integrative – creating conditions to cooperation between sectors and building public-private partnerships.

From a point of view of those considerations the most interesting is the last function that refers to deputing implementation of public tasks to external units. Among them the most determined ones seem to be logistic operatives because logistics with its coordination function creates the biggest possibilities of optimal forming joints between public and economical area. Logistic operatives can take on various tasks which area is unlimited. They can provide classical (transport, warehouse jobs, order picking), consulting, financial and personal services. They can also produce public tasks (like export of waste) and use public sector logistically (feed of the hospitals). Use of logistics to complete public tasks requires creating proper procedure of transmitting production of tasks to external units. Those procedures are public orders.

Public orders as the social base of responsible Logistics of public services

From the principle of subsidiarity it results that public sector should concentrate on its main activity and commercialize the rest of it. This creates possibilities to develop logistic public services. Transferring implementation of public benefits to logistic operatives makes it real to implement CSR concept to the public sector. It comes from a fact that thanks to Logistics initiative, some climate conferences have been and are organized where problems of development, responsibility and ethics are discussed. In implementation of logistic processes they started to look for pro-ecological solutions and taking into account results of logistic actions for the environment so the society could find their reflection in Logistics Social Response (Carter, Jennings, 2002). Coordination function coming from idea of Logistics lets to creating partnerships between sectors and promoting way of cooperation that lets to mutual determining goals taking into account rules of balanced development and social good.

Because of public paymasters decisions are made by political and administrative teams, they describe conditions of public-private contracts. Because of long term character of public tasks should have form of contracts with limited time of duration, depending on type of contract and quality of services (Budäus, 2005, pp. 11–18). As a consequence public sector can get logistic operatives to completing public tasks on regulated concurrency rules based on act about law of public orders. Procedure of a choice of contractor consists of two levels. Allowance g to the second requires from potential entrepreneurs completing formal requirements and having attributes to predispose them to completing the task, for example; knowledge, experience, technical and human potential and proper financial conditions. In second level choice of the most advantageous offer is being made for example; the cheapest or the quickest. These criteria shouldn't by the only ones because they can lead to short termed advantages (Kauf, 2008, p. 265).

From the point of view of social responsibility the key factors of choosing logistic contractor should be environmental policy and social aspects. Those should be literally concluded in tender conditions. Only those completed ones will be environmental and social provisions coming from rules in Law of public orders. Those modeled ones in the same way as polish law system has been introduced in July 2016. At that time an act about changing the act of Law of public orders (Dz.U. 2016, poz. 1020) has been approved, it implemented guidelines of European Union Parliament and European Council from February 2014. Those guidelines have become very effective tool socially responsible of public orders which means that those which respect human and labor rights, support social attachment and social economy and promote mutual equal chances; availability and universality of public orders. Idea of taking into account social aspects in European Union forms Strategy called 'Europe 2000' for intelligent and balanced development beneficial for social connection. Its main goal is to support; economy of the effective use of resources, more environmental friendly and beneficial for social connection. On the other hand idea of consideration of social aspects on national level forms for example Strategy 'Efficient Nation2020'. Concordantly with its rules, goal of effective management of physical and financial resources, public sector should spread already existing law results considering social issues (social clause)and ecological aspects (green public orders) in tender procedures.

Social implementation of responsibility to public services Logistics should be precluded with analysis of antisocial influence arise from ordering process and identification of social areas if interest. Also important are partnership relations with contractors (logistic operatives). Respecting social dimension in choosing logistic contractor it can find their reflection in preferring units that care about safeness and health of their employees, promoting an employment of workers from nearest area, those who follow basic work standards , fair wages or

equality of chances. Eliminating those who do not complete those requirements coming from law of work and social or health securities of hired workers .

New law regulations let to choose those logistic partners who are directing themselves not only with economic issues but social ecological. Concordantly with amendment of act law of public orders the criteria of assessment of offers is price, or expenses or different criteria related to unit of order. This means that we should choose the most economically efficient offer which doesn't mean the same as the cheapest one. As an effect it will let to for example buy more expensive but more environmentally friendly and cheaper in exploitation ways of public communication (smaller use of fuel) or devices used in implementation of infrastructures investments. Environmentally friendly product, even more expensive one, in longer perspective can become cheaper one or equally cheap as the product that we used until now. Explanation of a choice of the most economically friendly offer in this case would be Life Cycle Cost (LCC) analysis. Defines it Directive 2014/24/eu of the European Parliament and of the Council at art. 2 p. 20: „life cycle all consecutive and/or interlinked stages, including research and development to be carried out (…) throughout the existence of the product (…). According to art.91 ust. 3c of act of Public Orders Law these are the costs connected to buying a product, its use (use of energy and different resources), maintenance and with drawl of exploitation (costs of recycling).

Strong connections and dependencies between sectors, especially their integration and merging in process of implementing public tasks cause that results of actions of one units have very strong influence on reputation of others. Facilitation of elimination of risk transpires in order to widening responsibility. In area of Logistics and management of chain of deliveries, widening of responsibility is described as corporate social watchdog and it stands to taking over dominant position in chain of deliveries by a company or leading corporation which describes standards for their suppliers directed by their behaviors in way of their values and expectations. In case of implementation of public services role of corporate social watchdog takes off the public administration and standards are described in order to tender procedures. Moreover public sector takes paternalistic responsibility for their entrepreneurs because from power of law, the responsibility for availability of services is in his hands .In case of not completing the task by a private unit, public contractor who is committed to deliver a service anyway. This causes that division of risk is asymmetric. Concordantly with the concept of corporate social watchdog relationships between public administration and public services entrepreneurs are main point of interest (Faisal, Banwet, Shankar, 2006, p. 535). As an effect, disputing pursuance to partnership relations between sectors , some differences in tender forces, which is usually at public sector side, are having place. In many cases entrepreneurs understand reasons of existing this inequality and are able to accept it.

Above data directs to transformation of CSR concept in direction to its domination not only in economic units but also whole width of connection between public and private sector. Necessity to socially forming of responsible logistic of public services comes from expectations of the society. Those apply to making only smart and necessary purchases for example products that in possibly smallest point having impact on environment and taking into account socially-economical results of shopping decision.

Summary

Based on made studies it emerges that among main criteria , which should be implemented with harmony with social responsibility rules in public orders are; ecological aspects (solutions that in whole cycle of products life have

the smallest negative impact on natural environment) and social (employing disabled and people from the nearest area, guarantee of minimal wages). Taking them into account leads to many positive effects:

- improving quality of life, health and satisfaction of citizens – lowering level of global warming,
- reduction of expenses– for example energy–saving results,
- solving social issues–for example influence on policy of employment in the nearest area,
- control of following the law by entrepreneur – for example unfair actions to employees,
- image advantages and demonstration of social sensitivity.

Social responsibility more and more often is seen as one of key megatrends of logistics that's why it can support implementation of public tasks in important way. Anchored in logistics function of coordination, lets to optimize connections between public area and economic one. Logistic operatives can deliver almost unlimited variety of services, from classical ones (transport, warehouse jobs), through consulting, financial, personal, to public tasks (export of waste) and logistic services (supplying hospitals).

References

Amirkhanyan, A.A., Kim, H.J., Lambright, K.T. (2007). Putting the Pieces Together: A Comprehensive Framework for Understanding the Decision to Contract Out and Contractor Performance. *International Journal of Public Administration*, *6* (30).

Budäus, D. (2005). Public Private Partnership – Kooperationsbedarfe, Grundkategorien und Entwicklungsperspektiven. In: D. Budäus (ed.), *Kooperationsformen zwischen Stadt und Markt*. Baden-Baden.

Carter, C.R., Jennings, M.M. (2002). Logistics Social Responsibility: An Integrative Framework. *Journal of Business Logistics*, *1* (23).

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions (2008). Brussels.

Directive 2014/24/eu of the European Parliament and of the Council (2014).

Dz.U. (2016). Prawo Zamówień Publicznych, Dz.U. poz. 1020.

Faisal, M., Banwet, D., Shankar, R. (2006). Supply chain risk mitigation: modelling the enablers. *Business Process Management Journal*, *4*.

Green Paper (2008). Promoting The European framework for the Corporate Social Responsibility, European Commission 2008-SEC (2008)2853. Brussels.

Kauf, S. (2008). Partnership as a tool in local development. In: L. Jakubów (ed.), *Cooperation of public services, universities and companies in local development*. Wrocław: WSZ „Edukacja".

Kauf, S. (2014). Public logistics – development and determinants. In: A. Bujak, M. Paradowska (eds.), *Challenges and Conceptions in Contemporary Logistics* (pp. 45–57). *Sciencific notebooks of WSB Wrocław*, *1* (39).

Kuhlen, B. (2005). *Corporate Social Responsibility (CSR). Die ethische Verantwortung von Unternehmen für Ökologie, Ökonomie und Soziales*. Baden-Baden.

Savas, E.S. (2000). *Privatisation and Public-Private Partnership*. New York.

Teneta-Skwiercz, D. (2009). Role of the government administration in area of development CSR w Poland. In: Z. Pisz, M. Rojek--Nowosielska (eds.), *Socially responsible of business. Controversial conditions, good and bad practices*. Wrocław: Wrocław University of Economics.

Tribunal of Constitution (2004), act from 27.09.1994, W 10/93, OTK 1994, part. II, p. 191 and others.

WWodecka-Hyjek, A. (2008). Odpowiedzialność społeczna w administracji publicznej. In: W. Błaszczyk (ed.), *Nurt metodologiczny w naukach o zarządzaniu – w drodze ku doskonałości*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

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OPPORTUNITIES FOR CONSUMER PARTICIPATION IN POST-PURCHASE PHASE IN SERVICE VALUE CREATION

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Abstract

Participation of clients in the creation of value for contemporary organizations refers both to companies offering material products as well as non-material ones. Services, due to some specific characteristics, and the indivisibility of providing service with consumption process, provide convenient opportunities for a client to participate in the rendering process as well as in the pre-purchase and after the completion of a service stages. Customer engagement in value creation can take many forms, both through direct contact and use of the Internet.

The aim of the article is to present the possibility of co-participation of clients in value creation of service products, with emphasis on their Internet activity. In the article, based on theoretical reflections, were presented the results of a survey conducted in 2017 among 256 young consumers. Studies have shown that respondents' prosumer activity on the Internet takes place mostly after the transaction, mostly as recommending specific service providers, and less likely sharing negative feedback. In general, the respondents rated their involvement as moderate, slightly higher in this respect were men, among whom however one in three, has assigned himself the lowest rating in this regard.

Introduction

Standard services' characteristics such as intangibility, inseparability, heterogeneity, and perishability (Gilmore, 2006, pp. 17–18) make the customer in a service company more than just a consumer/purchaser, as he becomes a co-creator of a service process. Particularly important role in this respect is played by the intangibility of services and their inseparability, which means simultaneity of service provision and consumption. S.L. Vargo,

R.F. Lusch suggest that mutual interaction requires first and foremost building symmetric access to information, cultivating dialogue, building value-creating networks, learning by exchanging, and adopting a relational perspective (Vargo, Lusch, 2004, p. 7). As A. Hamrol states, the interaction between a service provider and a customer "cannot be reproduced in series as in production processes" (Hamrol, 2007, p. 20). The interactive nature of a service implies the involvement of a recipient, who "becomes a part of a service". Thus, it can be stated after W. Trzebiński that quality of a service and the level of satisfaction with its implementation is largely dependent on a customer himself, while the source of the difference in perception of the quality of a given service among customers is the customer's demand for the service (Trzebinski, 2006, p. 27).

It should be stressed that customers are primarily involved in contributing their value in the process of providing services. K. Rogoziński points out that a routine service order does not exclude an authentic dialogue, without which it is impossible to establish any lasting relationship between the service provider and the recipient. The cited author emphasizes the fact that the term "recipient" does not mean a reduction of client's role to passive reception. A client not only specifies his expectations for the service but also actively contributes to the service by actively participating (Rogoziński, 2000, p. 17). Consumers can also support the process of service creation at the pre-purchase phase (eg, refinement ideas, pre-testing concepts) and in the post-purchase phase (eg recommending service to other customers).

The purpose of the paper is to present the possibility of co-participation of clients in the creation of services value. Due to the young age of respondents showing the typical characteristics of digital consumers, the empirical part is focused on the Internet's pro-consumer activity, mainly related to activities in the post-purchase phase.

Co-creation concept in the light of DART model

Among the numerous authors analyzing the issue of customer value co-creation, a large contribution should be attributed to publications of C.K. Prahalad and V. Ramaswamy. In their view interactions between an enterprise and a customer in the process of co-creating services require respecting four key assumptions: dialogue, access, risk assessment, and transparency – so called DART Model (Prahalad, Ramaswamy, 2004a, pp. 23–31).

Dialogue means interaction, deep commitment and willingness to act. It includes not only exchanging or sharing knowledge, but also a whole new quality of mutual interactions (interactivity, deep commitment, listening ability, empathic understanding of consumer experience). The dialog allows users to turn their value proposition into a value-added process for the organization. This feature in the practice of service companies is implemented not only during purchase phase but also in the pre-and post-purchase phases. In practice, it requires the creation of a forum where a dialogue can take place, often involving building thematic communities around specific brands or service providers.

Access – presupposes the opportunity to take advantage of certain elements of the offer, the desired experiences without having to take possession of them. So not only at the last stage of the buying process (sale and transfer of property rights) but also at the design and product development stage, customers should be able to "experience value ". In the case of services, mainly due to their intangibility and perishability, an experience of value before purchase may be difficult, especially in relation to the so-called "pure" services.

Transparency – refers primarily to information access by customers who are involved in product development and are increasingly aware of the information they need. Transparency of information makes it easier to build

trust between customers and manufacturers (asymmetry disappears). It should be emphasized that in relation to services, informal information from other recipients is a significant source of information for formal sources.

Risk Assessment – In recent years, debates on risk and compromising between hazards and benefits of buying specific, questionable side effects of products and services (such as hormone therapy) have intensified. The multidirectional discussion of potential risks makes consumers using their experience and knowledge capable to counteract the negative phenomena, thus taking over some of the responsibilities associated with the purchase of problematic products (Prahalad, Ramaswamy, 2004b, p. 8).

Combining elements of dialogue, transparency, risk assessment and access makes it possible for companies to take better decisions, more effectively engage clients as co-workers, or build a new quality of relationships based on dialogue and trust between equal partners (Dziewanowska, 2013, p. 46).

The application of the concept of value co-creation obliges service providers to work with clients to define problems related to the preparation of a service offering, primarily through direct contacts and social networking sites, and to identify ways to resolve them. It is essential to ensure diversity of activities, considering the increasingly individualized needs of modern consumers.

Consumer of the 21st century as a co-creator of products and services value

The consumer of the 21st century is more and more educated and demanding towards products and services offered to him. His active approach and commitment is the result of the transition from passivity to action, from anonymity to the desire for subjective treatment, from seeking material benefits to seeking emotion, experience or contact with nature. Thanks to the rapid development of new technologies and the spread of Internet access (in Poland by the end of 2016 already 80% of households had access to the Internet – Raport strategiczny..., 2017, p. 10), the consumer of the 21st century not only has wide access to up-to-date information but also can edit and transfer it. This activity is especially noticeable among young people, most often using the Internet (*E-commerce...*, 2017), who as digital consumers systematically make purchases in e-shops, using a variety of mobile applications.

In the light of the growing knowledge and activity of today's consumers, it is becoming increasingly important for companies to engage the customer in the process of contributing to the organization's value. An active, engaged client is referred to as a prosumer. This concept gained popularity in the 1980's with A. Toffler's works, who defined the prosumer as a consumer involved in the product co-creation process, to meet his or her best needs (Toffler, 1980).

The problem of dual role played by consumers is more and more often being taken up in a domestic and foreign literature of the subject. Among the proposed definitions, one can observe the lack of clarity, some authors narrow prosumption activities only to participation in product development, omitting other possibilities of influence (prosumer as a person co-creating goods and services by choice). Meanwhile, the consumer of the 21st century has an increasing role to play in creating a product and organization image, inter alia by participating in marketing communication process, especially with the use of a hypermedia computer environment. Increasing consumer activity is largely connected with the development of modern forms of communication (social networks, collaboration platforms), which allows creating a new quality of relationships with customers. Community building is related to the concept of tribalism and assumes that consumers spontaneously connect with specific brands and products, and exchange information as well as opinions, which is the first step in adopting prosumer attitudes.

The widespread use of prosumer activity in the definition of a prosumer was emphasized among others by A.I. Baruk. According to the author, a prosumer is a buyer co-participating with a seller or/and other buyers in the process of marketing creation, whose activity contributes to generation of tangible effects (eg. products) and/or intangible ones (eg. image, brand) beneficial to all participants of a created by this cooperation relationship system in the form of a community of marketing partners linked by strong, positive emotions (Baruk, 2017, p. 87). In reference to the complex nature of the prosumer behaviour, the author exposes, in particular the innovative, relational, image and ethnocentric dimensions of prosumer behaviours (Baruk, 2017, pp. 88–117).

In the light of the presented assumptions, the authors argue that the prosumer should be understood as a consumer conscious and engaged in the process of creating value of a product and organization at the pre-purchase stage, during purchase or after a transaction who through active interaction with the organization, contributes to achievement of mutual benefits, not only in economic terms but also social or image ones.

Method

In the article, apart from the critical method of literature analysis related to the subject matter, the results of own research conducted in January 2017 on the n = 256 sample were presented. Respondents were students of the Faculty of Economics at the University of Rzeszow at the age of 19–26, 76% of the respondents were women. Nearly half of respondents (47.2%) were rural residents, 39.0% came from cities up to 100 thousand, while 13.8% represented cities over 100 thousand residents. Random non-probability sampling was applied. In addition to the basic descriptive statistics measures, variance analysis was used and the NIR significance test at $\alpha = 0.05$.

Results

The research was aimed at identifying the involvement of respondents in the process of creating value of selected services among the surveyed consumer groups, who mainly use the Internet to express their opinions and assessments. These are people who usually search before buying, looking for other users' opinions, ask questions on the web, describe products themselves, promote their values, and recommend buying to others.

With regard to service units, the activity of consumers in the post-purchase phase primarily comes down to evaluation of transaction satisfaction as well as recommending the product/company to other potential customers (Table 1).

Table 1. Activity of respondents in expressing their own opinions on selected types of services (%)

Type of service	Percentage of respondents making at least one assessment:	
	positive	negative
Trade	52.0	41.8
Gastronomic	50.4	43.0
Education	45.3	34.8
Banking	41.0	30.9
Tourism	40.6	30.5
Public administration	36.3	32.0
Medical	35.9	30.1
Insurance	33.2	28.1

Source: own calculations based on survey data, n = 256.

The results of the study show that the greatest activity in terms of expressing their post-purchase feelings was noticed in relation to commercial and catering services, which at least once on their own initiative was performed by more than half of the respondents. It is worth emphasizing that positive feelings are shared more often than negative ones. It is also worth pointing out that similar situation was observed in relation to all examined services. The lowest evaluation activity was recorded for public administration, medical and insurance services, with an average of one out of every three respondents. Gender analysis of respondents showed that male respondents were more active in expressing opinions, both positive and negative (Table 2).

Table 2. Activity of respondents in expressing written opinions on selected types of services, regarding sex (%)

Rodzaj usługi	Percentage of respondents making at least one assessment			
	positive		negative	
	women	men	women	men
Trade	47.1	67.2	36.4	56.9
Gastronomic	46.0	60.3	35.9	60.3
Education	40.4	56.9	28.8	50.0
Banking	37.4	48.3	25.3	44.8
Tourism	37.9	44.8	25.3	43.1
Public administration	31.8	46.6	26.3	48.3
Medical	32.3	46.6	25.3	44.8
Insurance	28.8	43.1	22.7	41.4

Source: own calculations based on survey data, n = 256.

In order to determine whether gender of respondents has a statistically significant impact on the level of post-purchase activity, the analysis of variation and NIR significance test were performed. Based on the obtained results, it can be concluded that gender has significantly influenced the consumer's commitment, as evidenced by the value of probability *p level* of 0.00002. Men rated their activity in opinion sharing significantly higher than women. A higher level of activity by men is found for all types of services analysed. The most noticeable is the assessment of insurance services, least banks, and catering services. It is worth pointing out that the surveyed consumers statistically significantly (p = 0.00013) more frequently assessed their activity in positive opinions – 41.8% than negative 33.9%. It is visible both for men (51.7 and 48.5% respectively) and for women (37.7 and 28.3%, respectively). This consistency is reflected in all types of services analyzed, except for office services, where men were marginally less positive (46.6%) than negative (48.3%).

According to research conducted by the authors, besides expressing their opinions after the transaction, consumers also use other forms of product/company support, such as liking/ sharing in social media, as indicated by the vast majority (nearly 80%) of the respondents. It is worth emphasizing that seven out of ten respondents have done it several times or do it often (Kuźniar, Surmacz, Szopiński, 2017).

In the final part of the survey, consumers were asked to specify on a scale of 1–5, to what extent do they feel as so-called active consumers, having at least partly impact on the structure of service products or creating the image of a company they use (Table 3).

Table 3. Overall self-evaluation of respondents' participation in the process of creating value of purchased services

Description	Total	Sex	
		women	men
General assessment on 1–5 scale	2.47	2.46	2.48
Percentage of extreme assessments			
– assessment 1 (%)	23.00	21.20	29.30
– assessment 5 (%)	2.30	1.52	5.20

*1 means lack of engagement, 5 – very high engagement.

Source: own calculations based on survey data, *n* = 256.

The research shows that respondents rated their involvement as moderate. Men ranked slightly higher in this regard, yet every third men gave himself the lowest score. The highest ratings, reflecting very high prosumers' activity, occurred only for a small number of respondents.

Conclusions

The process of contributing to the value of an organization refers both to companies offering tangible products and services. Knowledge, experience and customer engagement allow, among others, to define common problems, to indicate how to solve them, or to recommend to other users. In this respect, the Internet offers a wide range of possibilities in which users in many ways can express their acceptance or dissatisfaction with a specific market offer. Their activity in the network is not only to receive marketing communications, but also to edit or share opinions about products and brands with other users. They also express their engagement by making posts available in social media, participating in product knowledge contests, submitting their ideas, and disseminating consumer knowledge.

When it comes to services, providers seek to leave the recipient free to shape the structure of the service to meet the specificity of the buyer's expectations. It is increasingly important for service providers to be open to innovative solutions, especially in the field of communication, which enables active dialogue and allows them to co-create and survive the creation of a service offering. An active role in this area is the activity of consumers after the purchase of a service, who on the Internet share their feelings and opinions, thus contributing not only to increased sales of service offerings but also to strengthening the image of the organization.

References

Baruk, A.I. (2017). *Prosumpcja jako wielowymiarowe zachowanie rynkowe*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Dziewanowska, K. (2013). Wykorzystanie koncepcji współtworzenia w nowym podejściu marketingowym. *Handel Wewnętrzny*, *3*.

E-commerce w Polsce 2016 (2017). V Gemius dla e-Commerce Polska.

Gilmore, A. (2006). *Usługi. Marketing i zarządzanie*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Hamrol, A. (2007). *Zarządzanie jakością z przykładami*. Warszawa: Wydawnictwo Naukowe PWN.

Kuźniar, W., Surmacz, T. Szopiński, W. (2017). Wirtualizacja konsumpcji i jej oddziaływanie na kształtowanie postaw i zachowań prosumpcyjnych wśród młodych konsumentów. *Annales Universitatis Mariae Curie-Skłodowska Sectio H Oeconiomia*, *2* (52), 143–150.

Prahalad, C.K., Ramaswamy, V. (2004a). *The future of competition. Co-Creating Unique Value with Costumer*s. Boston: Harvard Business School Press.

Prahalad, C.K., Ramaswamy, V. (2004b). Co-creation experiences: the next practice in value creation. *Journal of Interactive Marketing*, *3* (18).

Raport strategiczny. Internet 2016/2017 (2017). Retrieved from: https://iab.org.pl/wp-content/uploads/2017/06/IAB_Raport-strategiczny_INTERNET_2016_2017_FIN.pdf (5.08.2017).

Rogoziński, K. (2000). *Nowy marketing usług.* Poznań: Wydawnictwo Akademii Ekonomicznej w Poznaniu.

Toffler, A. (1980). *The third wave*. New York: William Morrow & Co.

Trzebiński, W. (2016). *W jaki sposób klienci dokonują oceny usługi?* Warszawa: Oficyna Wydawnicza SGH.

Vargo, S.L., Lusch, R.F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, *68*.

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USING LEAN GOVERNMENT IN IMPROVEMENT OF THE SERVICES IN PUBLIC ADMINISTRATION ON THE EXAMPLE OF MARSHAL'S OFFICE IN LUBUSKIE VOIVODESHIP

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Abstract The aim of the article is to present the possibilities of using lean government for improving services in Polish public administration. The first part of the article outlines the specifics of public services. Then the essence of lean management was discussed and also the examples of its use in public administration in the world. The final part of the article presents the case study of lean government implementation to improve the selected processes. The study was processed using the value stream mapping tool (VSM). The solutions to eliminate process waste and main barriers to streamlining action are presented.

Introduction

In the Polish public administration a trend, aimed at improving both effectiveness and efficiency of its functioning, has been observed for many years. On the ground of Polish public administration, quality management systems compliant with the requirements of ISO 9001 became particularly popular. This is mainly due to them that in Polish public administration procedural approach was implemented and the striving for continuous improvement

of quality of service in accordance with the PDCA cycle. Literary research (Bugdol, Pakuła, 2017; Flieger, 2013; Ludwiczak, 2014) show that in many cases the application of a procedural approach in the Polish public administration does not produce the expected results. Among the most important obstacles to application of this orientation are legal regulations, functional organizational structure, lack of decision-making powers at the lower levels of the organizational structure, insufficient knowledge of the essence and implementation of the process approach can be pointed out. Difficulties in process management occur especially in large units of public administration, which include the provincial governments. The services implemented by Marshall offices, as executive bodies of provincial governments, are characterized by diversity and complexity. Due to large social groups and organizations, which are the recipients of these services, it is difficult to identify the customers and their requirements. One of the process oriented concepts, focused on creation customer value at the same time, is lean government. The aim of the article is to present possibilities of using lean management in the improvement of the services in Polish public administration.

Literature overview

Lean government is translation of popular in private equities concept of Lean management into public administration. So the essence of lean management is so called "Lean thinking" allowing for, according to Womack and Jones: defining value, optimal ordering of activities that create value, performing activities that create a stream of values without interruption at the time the customer requests the demand, gradual increase in effectiveness of implemented activities (Womack, Jones, 2001). It is therefore about planning and then continuously improving value stream so as to provide the customer with the expected value in the possibly most effective way.

Lean government concept has gained huge popularity in the public sector in the world, but in Poland, among public managers, it is still unnoticed. Many public institutions in the USA have an experience in using it, including Fort Wayne (Graham, 2006), city of Peoria and McHenry in Illinois, Conroe in Texas, Palm Bay, Florida, Cincinnati and Montgomery in Ohio and Pitkin Country in Colorado (Kavanagh, 2010). Programs that increase the efficiency and productivity of work, resulting from the basic assumptions of Lean management, have also gained great popularity among others in Great Britain, Australia and New Zealand (Grycuk, 2011). Numerous examples of positive effects of lean management in the context of streamlining processes in public administration can be found in the literature. Most of these studies are conducted in the form of case studies (Demel, 2013; Di Pietro et al., 2013; Hasenjager, 2006; Kavanagh, 2010; Krings et al., 2006, Maarse, Janssen, 2012; Randor, 2010; Waterman, McCue, 2012). The research of the above mentioned authors suggests that the use of lean government can contribute to improving the functioning of processes, especially those that have very complex nature such as public procurement. By identifying waste in processes, the time and cost of implementing them can be significantly reduced. Furthermore, by stabilizing and standardizing value streams, it is possible to reduce the number of errors.

Despite many advantages of using lean government, the researchers point out the problems emerging during the implementation. Maarse and Janssen note that lean is focused only on efficiency and customer value creation and does not take into account the public values. So there is focus on creating customer (citizen) value and it neglects to create value for the democratic system (Maarse, Janssen, 2012). Randor points out that many public administration employees in the investigated offices had the feeling that lean was being imposed and that staff direct-dealing with customer service had nothing to say in its execution. The employees paid attention to increased productivity and error reduction, but there was lack of focus on customer needs and motivation (Randor, 2010). It is

therefore important to find the answer to the question how to manage and engage employees in lean organization improvement. In turn Arfmann and Federico think, that weakness of lean is its maladjustment to service specification (Arfmann, Federico, 2014).

The value of applying lean government concept in Polish public administration is indicated by Krasiński (Krasiński, 2011) and Nogalski, Czerska and Klimek (Nogalski et al., 2010), who comes to the conclusion that the key actions to improve the work of the office are to focus on investigating the causes of problems, eliminating waste, improving internal communication, and delegating authority. In Polish public administration there is still lack of practical examples of implementation of the discussed concept.

Method of study

To perform the purpose of the study, a qualitative research was conducted in the form of a case study. The study was based on the interviews with the staff involved in the process and on documentation studies. The study was conducted by using Value Stream Mapping tool. For the purpose of analysis, standard graphical symbols were used to adjust some of them to the specificity of the administrative processes. Data tagging applied in the process:

- P/T (Process Time) – time of actual execution of the activity, ie. actual verification of the submitted application by the employee,
- L/T (Lead Time) – time necessary to move one application through the process from the beginning to the end (actions + breaks, interruptions),
- C/O (Changeover Time) – time, for example, to file a single application and prepare to verify another application,
- % C/A – number of positively completed negotiations, opinions, agreements, etc.

Prior to the study, the employees were presented with its goal, and it was explained to them what is the lean government concept and what for is the mapping tool. After creation of the current state map together with the employees working on the process, the workshop was held, where the improvement plan was drafted and barriers to improvements were identified. One of the most important processes implemented by the Marshal's offices is the execution of tasks commissioned by the governmental authorities in the area of regional development. For the purpose of this study, one of the processes has been chosen to conduct a grant competition for municipalities to develop or update revitalization programs. This task is characterized by a high degree of complexity, involves more than one organizational unit and its client is the Ministry of Regional Development, that the provincial government has concluded the agreement with. The general course of value stream is shown in Figure 1.

Due to the high degree of complexity of the process and its execution time, which was envisaged in the contract for more than 23 months, two processes were selected for further analysis: recruitment and evaluation of the applications and the contracts preparation, which were highlighted in Figure 1. In the examined process, besides the provincial government and the Ministry of Development, local governments of the Lubuskie voivodeship, which are beneficiaries of the aid, participate. They can be treated on the one hand as suppliers (they provide grant applications) and as a specific type of a customer (they support the launch of processes aimed at revitalizing degraded areas by helping to prepare revitalization programs).

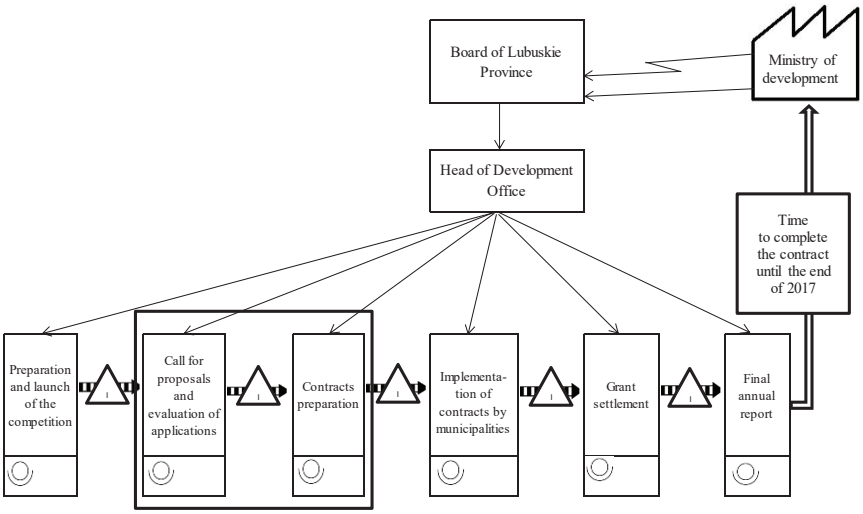

Figure 1. Map of value stream for conducting a grant contest for municipalities to develop or update revitalization programs

Source: own study based on surveys.

Study results

The analysis of value stream from the moment of grant call to signing the grant agreement for a randomly selected application has shown that the overall lead time (L/T) is 95 days and 1.5 hours, while process time (P/T) is 28 hours and 5 minutes. This means that value adding activities in the process represent 3.7% of process time. The remaining time of transition consists of waiting for the documents to be processed further, unnecessary transport between organizational units, or waiting time during the exchange of correspondence with the municipality. An analysis of the current state map, made by the author and the team of employees involved in the process under investigation, has highlighted the places where waste is occurring.

The first noted problem was the long waiting time of the application during the formal and substantive evaluation. It was the result of using batch processing in the office, ie. only after the end of the competition the formal assessment of the applications was started, and the substantive assessment was launched only after the formal evaluation was completed (Figure 2). This resulted in total waiting time of 51.5 days for the analyzed proposal until the start of negotiations with the municipality about the amount of the budget, while the value added activities in the process (P/T) were 17 hours.

As a streamlining solution it was proposed to combine the formal and substantive assessment into the continuous flow area. Prior to the change, the formal evaluation of all applications was handled by two employees, who then joined the team working on substantive evaluation. Additionally, according to MRR requirements, each application was substantially evaluated by two-pair eye, ie. the evaluation was made by two independent employees, what additionally increased waiting time for evaluation of particular applications. Once the changes have been made, the proposal, which will be positively evaluated positively, will immediately be submitted for substantive evaluation and, if necessary, to the negotiation. The change will shorten the evaluation time for applications by approximately 5 days (i.e. the time needed for a formal assessment with the involvement of two full-time employees).

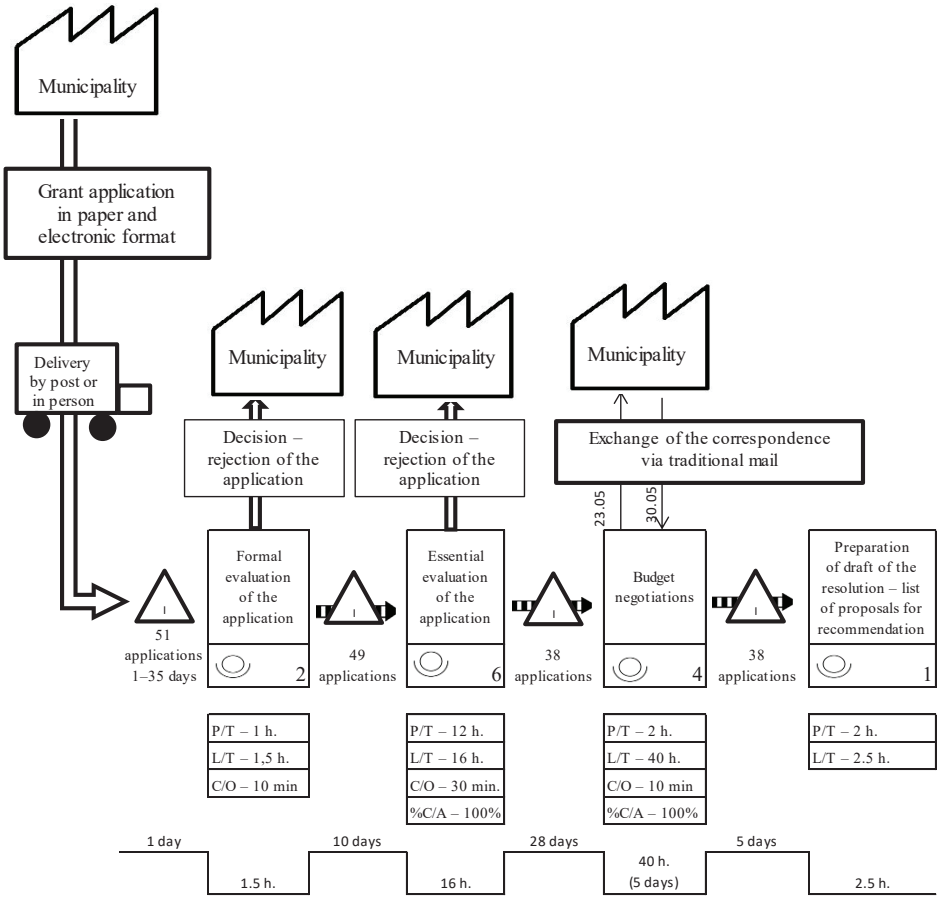

Figure 2. Part of value stream map concerning the evaluation of the grant application

Source: own study based on surveys.

Another waste observed during the analysis of the current state map is the improper processing, to which Lisiecka and Burka count, among others, as inadequate or outdated technologies (Lisiecka, Burka, 2015). The term can also refer to the distribution channels through which communication with the customer takes place.

Figure 3 shows three parts of value stream map showing the exchange of documents and information between the municipality and the Marshal's Office. It can be seen that each time the waiting time from the time of sending the information to receiving the reply via traditional mail took from 5 to 8 days. Replacing traditional mail by sending information electronically can reduce waiting time by approximately 4 to 6 days.

The third identified waste was over-processing when contract was approved by the lawyer, as shown in Figure 4.

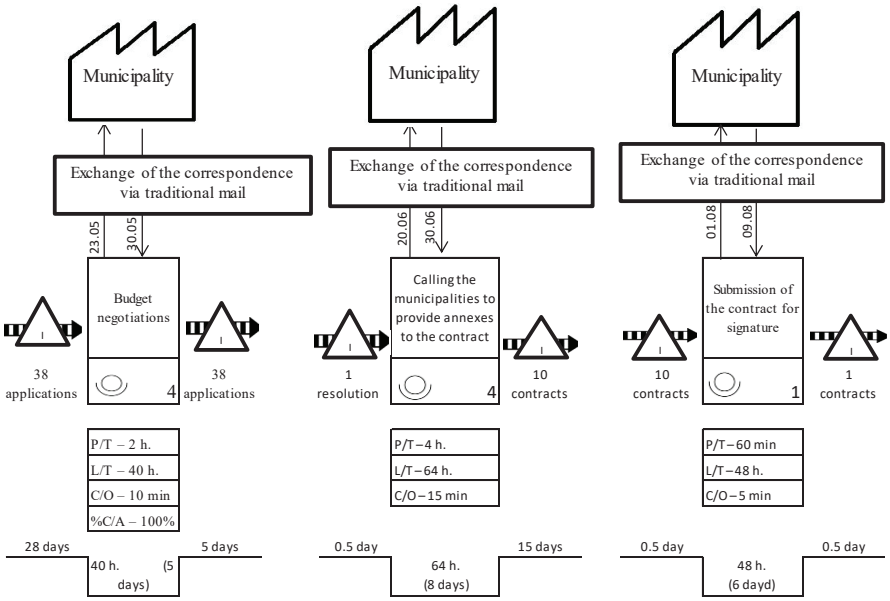

Figure 3. Three parts of value stream map showing the time devoted to the exchange of information between the municipality and the Marshal's Office

Source: own study based on surveys.

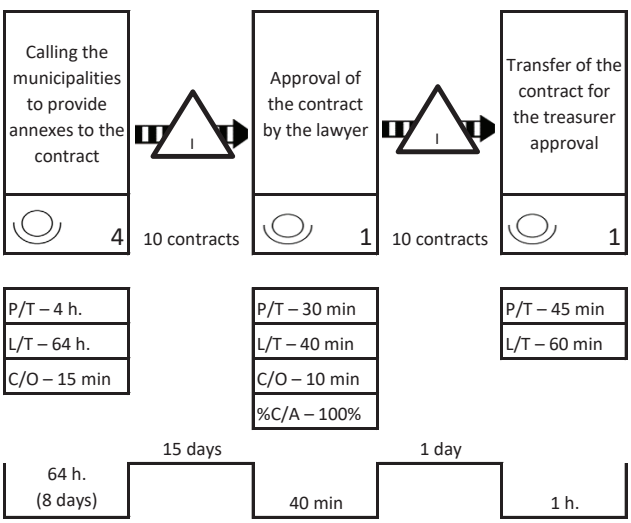

Figure 4. Part of value stream map concerning the contract approval by the lawyer

Source: own study based on surveys.

The interview shows that the lawyer reviews and approves the contract draft with the beneficiaries (municipalities) before signing the contract with the Ministry of Development (and before the call announcement). Reconsidering the contract identical to a previously approved by the lawyers draft can be regarded as duplication of the same operation and this step can be eliminated.

The fourth noted waste is over processing when the treasurer approves the contract, which is shown in Figure 5.

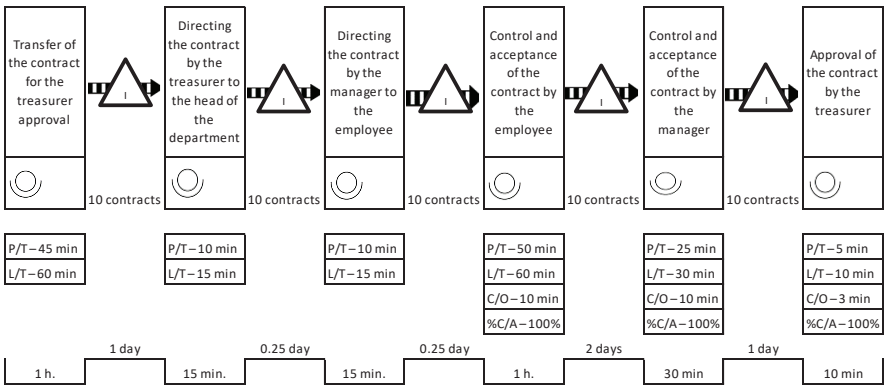

Figure 5. Part of value stream map concerning the contract approval by the treasurer

Source: own study based on surveys.

In the investigated office, with regard to the existing functional organizational structure, communication between the departments and the offices is formalized. Before the particular case is assigned to the substantive employee, the following path is followed: secretariat – director – secretariat – manager – employee. Employee empowerment can be used to solve this problem, that is empowering the contract auditor to approve the contract on behalf of the treasurer. This would reduce the path of the document circulation (reducing unnecessary transportation) and as a result shorten process time and breaks between the processing steps.

In addition, during the analysis of the map, attention was paid to the changeover time (C/O), which, in the case of administrative processes, is time spent on completing and postponing the documents, whose processing was completed and preparing another batch of documents before processing them. In order to improve the system of the workplace, which would contribute to reducing the changeover time, the use of 5S technique was recommended.

Presented above suggestions for improvement are the first stage of enhancement and do not close the possibilities of the further development of the process. They were developed on the base of the current state of human and material resources at the development office (eg. project supervisors – 3 employees involved in the project at 50% working time and 1 employee at 100% working time) and taking into account the parallel processes. The following obstacles (barriers) hindering or impeding improvements have been identified during the analysis:

1. Too detailed guidance on how to implement the competition imposed by the Customer (the Ministry of Development) in the contract.
2. Legal regulations and internal procedures for the document circulation.

3. Functional organizational structure and low level of emproverment.
4. Little flexibility in the scope of employees' responsibilities, limiting, for example, the possibility of adding more overloaded organizational units to the employees from other departments.
5. Lack of interest in shortening the process time justified by employees' long implementation deadlines set out in the agreement with the Ministry of Development.

In the case of the last barrier, it was noted that the staff engaged in the process of defining customer requirements focused exclusively on the Ministry of Development, so the institution entrusted to them. They did not, however, take into account the needs and expectations of the communities for which the shorter service time could have been important.

Conclusions

In conclusion, using lean government in Polish public administration can improve efficiency of its operation and increase customer satisfaction (for example, shorten service delivery time or improve communication channels). Nevertheless, one should be aware that implementation of this concept involves breaking down legal, organizational and human attitudes barriers. The example of applying lean government presented in this paper requires further research in the scope of usefulness of this concept in Polish public administration.

References

Arfmann, D., Federico, G. (2014). The Value of Lean in the Service Sector: A Critique of Theory & Practice. *International Journal of business and Social Sciences*, *2* (5), 18–24.

Bugdol, M., Pakuła, G. (2017). Korzyści wynikające ze stosowania podejścia procesowego zgodnego z nową normą ISO 9001 w realizacji usług administracyjnych. *Problemy Jakości*, *2*, 22–27.

Demel, S. (2013). Embracing 'lean' – It's all about the process, Hottopics [strategic sourcing], February/March 2013.16.

Di Pietro, L., Mugion, R.G., Renzi, M.F. (2013). An integrated approach between Lean and customer feedback tools: An empirical study in the public sector. *Total Quality Management & Business Excellence*, *24*, 7–8.

Flieger, M. (2013). Dojrzałość procesowa gmin w świetle współczesnych paradygmatów zarządzania publicznego: zastosowanie zarządzania procesowego w urzędach gmin – wyniki badań. *Nierówności Społeczne a Wzrost Gospodarczy*, *35*, 113–123.

Graham, A.R. (2006). Performance Is the Best Politics: How to Create High-Performance Government Using Lean Six Sigma. Fort Wayne: HPG Press.

Grycuk, A. (2011). Lean Government, czyli koncepcja szczupłego zarządzania w administracji publicznej. *Analizy BAS*, *3* (47), 1–9.

Hasenjager, J. (2006). Lean government (is not an oxymoron). A Connecticut Agency in efficiency's court. *Industrial Engineer*, July.

Kavanagh, S.C. (2010). *Less Time, Lower Cost, and Greater Quality: Making Government Work Better with Lean Process Improvement.* Chicago: Government Finance Officers Association.

Krasiński, M. (2011). Koncepcja kaizen w jednostce samorządu terytorialnego. In: M. Przybyła (ed.), *Nauki o zarządzaniu* (pp. 89–98). Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.

Lisiecka, K., Burka, I. (2015). Źródła powstawania marnotrawstwa w organizacjach na przykładzie usługowych przedsiębiorstw ciepłowniczych. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, *233*, 75–89.

Ludwiczak, A. (2014). Podejście procesowe a skuteczność usług w administracji publicznej. In: R. Kucęba, E. Kulej-Dudek, P. Pypłacz, K. Smoląg (eds.), *Koncepcje zarządzania współczesnymi organizacjami* (pp. 68–77). Sekcja Wydawnicza Wydziału Zarządzania Politechniki Częstochowskiej.

Maarse, N., Janssen, M. (2012). The Need to Adjust Lean to the Public Sector. In: H.J. Scholl M. Janssen, M.A. Wimmer, C.E. Moe, L.S. Flak (eds.), *Electronic Government* (pp. 54–65). Heidelberg: Springer. LNCS 7443.

Radnor, Z. (2010). Transferring Lean into government. *Journal of Manufacturing Technology Management*, *3* (21), 411–428.

Waterman, J., McCue, C. (2012). Lean Thinking within Public Sector Purchasing Department: The Case of the U.K. Public Service. *Journal of Public Procurement*, *4* (12), 505–527.

Womack, J.P., Jones, D.T. (2001). *Odchudzanie firm. Eliminacja marnotrawstwa kluczem do sukcesu.* Warszawa: Centrum Informacji Menedżera.

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MOBILE LEARNING AS AN INNOVATIVE LEARNING CONCEPT – THE RESULTS OF MODERN PROJECT

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Abstract The aim of the article is to present the concept of mobile learning as an innovative learning form. One of the key element in m-learning implementation is selection and evaluation of tools (applications) that can be used and contribute to achieve the learning objectives. On the other hand, it is important to increase the usage of such resources by the teacher and to implement innovative learning strategies on the basis of IT environment. Taking into account the above requirements, the results of the international Modern project (Mobile & Digital Elearning Toolkit – Modern Toolkit) will be presented: 1) report: "Audit of Digital and Interactive learning resources for European Vocational Training and Higher Education"; 2) report: "Pedagogic assessment of most promising mobile and digital elearning resources for European Vocational Training and Higher Education"; 3) "Modern Toolkit"; 4) training course concerning the implementation of innovative learning strategies in education ("MODERN Innovation in Teaching Course").

Introduction

The ICT (Information and Communication Technology) development influenced significantly on many aspects of our life, not excluding the education and the ways we learn. Many new learning methods and techniques were proposed and implemented changing the traditional realized didactic process. Focusing on the lifelong learning concept as well as highlighting the personalized approach to knowledge acquisition causes that there are new

requirements stated concerning the ways of didactic materials development and knowledge transferring. For this reasons, the need to complement resource-strained classroom teaching with more flexible, remote and available on many devices anytime and anywhere is becoming more common (Education and Culture DG, 2011).

The mentioned changes caused the continuous growth of distance learning education offer, and within its development, the m-learning concept (mobile learning concept) perceived as a complementary education method both to traditional learning and e-learning. The implementation of m-learning requires the utilization of appropriate applications and services that allow to prepare and develop the learning content, manage the prepared materials as well as engage students to become more active participants of the learning process. However, as shows the research (Empowering educators towards Europe 2020, 2011; Baran, 2014), despite the teachers and trainers understand the need to use modern technologies in education, many of them will have problem to find appropriate resources, use it in practice and adapt their facilities to the learning purposes due to the lack of experiences and professional trainings.

To respond the noticed needs, the Modern project was provided (Modern Project, 2017). The Modern Project (Mobile & Digital Elearning Toolkit – MODERN Toolkit) is co-financed by UE funds under the Erasmus+ Program within the key action "cooperation for innovation and the exchange of good practices" to promote the strategic partnership for vocational education and training. The aim of Modern project is to improve skills and ability to use modern technologies in teaching/learning process and increase teachers and trainers motivation to apply them in daily work. Modern purpose is to arouse interest of mobile devices usability in education among teachers and trainers and root self-confidence associated with the use of a tablet or smartphone in education process. To achieve this goals a few main tasks were defined:

- elaboration the list of applications and services oriented on supporting the implementation of innovative learning strategies, including mobile learning,
- indication the usefulness of selected solutions from the point of view of objectives pursued by the teacher/trainer,
- implementation the toolkit as an environment dedicated to acquire knowledge and skills about modern applications and services,
- elaboration the e-learning training course oriented on motivation the users to implement modern technologies in education.

As a result of defined tasks realization the following intellectual outputs were carried out:

1. „Audit of Digital and Interactive learning resources for European Vocational Training and Higher Education".
2. „Pedagogic assessment of most promising mobile and digital e-learning resources for European Vocational Training and Higher Education".
3. „MODERN Toolkit" with practical guidance to incorporate mobile and digital e-learning resources into daily teaching strategies.
4. MODERN Innovation in Teaching E-learning Course to motivate/guide educators to pursue more innovative pedagogic strategies using mobile and digital e-learning resources.

Literature review

The progressive development of the concept of open and distance learning (ODL) causes the need to apply more innovative, personalized and engaging learning methods and strategies during the education process

(Różewski, Kusztina, Tadeusiewicz, Zaikin, 2011). Next to commonly implemented and formalized e-learning and b-learning techniques and procedures, the m-learning concept is highlighted as a corresponding channel to formal and informal learning due to the increasing number of users of cell phones, smartphones, palmtops, handheld computers, tablet laptops, and e-book readers etc. (Sung, Chang, Liu, 2016; Docebo, 2014; Hojnacki, 2011). Mobile learning allows to deliver knowledge and education content on any platform and mobile device equipped by appropriate apps and tools to review the material and instructions, upload the assignments and work in online created social groups.

The mobile ecosystem has become the fastest-growing industry ever recorded (Docebo, 2014). As shows Chiang, Zhu, Wang, Cui, Cai and Yu (2013), the number of patents regarding to mobile learning in last decade has been growth dynamically reaching the number of 130 on the field of context creation, stimulation of learners interest, supporting the personalized intelligent pushed content and multidevice, multilocation, seamless learning.

Mobile technology offers a spectrum of tools for teachers and students dedicated to learning management, assessment, interactive content creation, communication between the learning process participants, engagement the students in learning process through the cooperation and interaction during the task realization as well as providing the complementary forms of acquiring knowledge. There are many literature studies (Zydney, Warner, 2015; Sung, Chang, Liu, 2016; Araujo, 2015; Hart, 2016; Classroomaid, 2012), that have on aim the classification of the available on the market applications and services as a possible source of modernization and the implementation of innovations in the education process. However the mentioned research present the short description of tools, they do not offer the expanded multi-criteria analysis of the tools, do not guide the end user how use the tools in practice and to do not suggest how to join the modern resources with the innovative learning and teaching strategies. In this case, the Modern project constitutes the useful supplement to the above.

Method

The Modern project is being carried out in an international partnership (Modern Project, 2017). The research team consists of 6 members: the international consulting company in the field of vocational training and e-learning application – Canice Consulting Limited (Great Britain), two universities – University of Szczecin (Poland), Universitat Politecnica De Valencia (Spain), the training organization oriented on the development of education programs and platform to enable entrepreneurs, employees and young people to actively participate in the labor market – Momentum Marketing Services Ltd. (Ireland), the European interdisciplinary association for lifelong learning – EUCEN (Belgium) and the European association created by and for people involved in vocational education and training in Europe – EfVET (Belgium). Each partner was involved in elaboration of the Modern project intellectual outputs, however there were selected task leaders to prepare the concept, coordinate and navigate the final result of each output (see the outputs listed in the Introduction section).

The first intellectual output -"Audit of Digital and Interactive learning resources for European Vocational Training and Higher Education" (Modern Project, 2017) – was created based on the following steps: 1) review the digital resources for learning including websites, software programs, apps and all other web 2.0 style resources, available in many different languages; 2) evaluation of selected tools in accordance with established criteria; 3) report elaboration and publishing; 4) recommendation of 25 most promising tools.

The following methods were proposed to elaborate the report and recommend the tools:

- the literature review to analyze and summarize the existing taxonomies of applications and services, their availability in partners languages as well as to define the tools supporting different fields of education process,
- discussion panel to select the list of tools, categories and criteria of the assessment,
- validation by usage the selected application and services to categorize and assess them in case of identified criteria,
- discussion panel based on elaborated report as well as personal experiences of the project team members concerning the tools utilization in case of education to recommend most promising resources.

The aim of „Pedagogic assessment of most promising mobile and digital elearning resources for European Vocational Training and Higher Education" was the analysis of strengths and weaknesses of top recommended resources based on potential for innovative pedagogic strategies (Modern Project, 2017). The assessment was made by in depth analysis of selected tools utilization and the literature review taking into account the pros and cons for education purposes and the ability to generate intended teaching-learning outcomes.

The third intellectual output, Modern Toolkit, was planned to offer concise, actionable information concerning the pedagogic contribution of selected tools allowing a trainer/lecturer the quickly review, choose those of most interest, learn and implement mobile and digital elearning resources during the education process. The toolkit was created as a result of partners panel discussion regarding the layout and section of the software environment and analysis of real life examples available in the literature.

The last of outputs, a short course to motivate/guide educators to pursue more innovative pedagogic strategies using mobile and digital elearning resources, called "The Modern Innovation in Teaching E-learning Course" (Modern Project, 2017) was provided in two main steps. The first one concerned the development of course curriculum and content based on case study examples and literature content analysis. The second on was oriented on online implementation of prepared materials and optimized them for mobile usage. Partners discussion was initiated to verify the content, research the appropriate case studies examples and analyze the tools for each module preparation.

Results

The four intellectual outputs elaborated as a result of Modern project realization let to build the compact picture of potential, that results from the application of the available on the market IT solutions and mobile devices during the learning process. The sequential nature of activities to achieve the substantive results caused that each result from the preceding stage was the basis for the implementation of subsequent steps with a precisely defined scope of work. The short overview of obtained outputs is presented in Table 1.

Each of the results is available free of charge via the project website www.modern.pm. In elaborated reports, there are presented the brief methodologies as well as the fully descriptions of analyzed resources. The value-added issue is the range of applications and services analyzed and assessed to help trainers, teachers and students to select the ones required for supporting the teaching/learning process. Additionally, the range of criteria that have been taken into account during assessment lets to consider many important aspects from the point of view of final user like price, interface language, ease of usage, availability on mobile devices.

Table 1. The results of Modern project

The intellectual output	The output main results	The output form
Audit of Digital and Interactive learning resources for European Vocational Training and Higher Education	More than 80 applications and services classified in 10 categories (Collaboration and File Sharing Tools; Quizzing, Polling and Assessment Tools; Screencasting, Audio and Capture Tools; Course Creation Tools; Presentation and Animation Tools; Bookmark and Curation Tools; Video Hosting and Editing Tools; Blogging and Social Media; Webinar and Meeting Tools; Course Management Tools) and assessed in accordance with the following criteria: languages available, usability, origins, accessibility and compatibility, open access/openness, reliability, cost, security & privacy. 25 tools (minimum 2 in each category) recommended to pedagogic assessment	Report in pdf form in 3 languages (English, Spanish, Polish – only part 1); interactive tools explorer in English
Pedagogic assessment of most promising mobile and digital elearning resources for European Vocational Training and Higher Education	25 tools strengths and weaknesses analysis in case of their usage for learning purposes	Report in pdf form in 3 languages (English, Spanish, Polish)
Modern Toolkit	Interactive environment describing the tools facilities; Guide for self-learning to implement the tool for innovative teaching/learning	Online tutorial; available in 3 languages (English, Spanish, Polish)
The MODERN Innovation in Teaching E-learning Course	5-module interactive course presenting the innovative teaching/learning strategies, elaborated by using the Modern tools	Online tutorial; available in 3 languages (English, Spanish, Polish)

Source: own elaboration based on Modern Project (2017), Malinowska, Niedzielski (2017).

The Modern Toolkit and the training course are the practical solutions to start using the applications and services as a way to enrich the education process (Modern Project, 2017). In attached tutorials, there are presented from one side the training materials with many case studies examples how to use the tools and from other side the ideas for implementing more innovative teaching/learning strategies to attract the didactic process. Both, toolkit and course are divided in predefined section, which allows to systematize the presented knowledge and obtain it by the final user in a small objects.

Conclusions

The implementation of m-learning in education is not easy, because it requires from one hand the professional skills concerning the usage of information and communication technologies and from the other the development of concept introducing the changes in the curricula on the basis of applied solutions. However mobile learning brings many advantages mostly involved with accessing to knowledge portions with no time and location restrictions, it requires to consider such problems like: limited or non-existent direct contact with teacher, providing the appropriate quality of the didactic materials, providing the appropriate engagement of the students in the learning process, inefficient Internet access, difficulties with limited storage capacity of mobile devices, small screen of the tools as well as difficulties connected with applying various applications by the final user. The mentioned issues open the research areas related to the creation the concepts, methods and technology applications for the mobile learning purposes.

The Modern project was initialized as a response for interest related to mobile learning tools and the ability to implement innovative teaching and learning strategies in education. The prepared results were concentrated to provide the comprehensive environment to encourage teachers and trainers to use digital learning resources to

more effective, relevant teaching causing a positive impact in their students (learning outcomes and engagement) and in the sector as a whole (ability to provide relevant training, keep pace with the technological changes taking place around them). All resources are available free of charge at the project webpage www.modern.pm (resource tab).

References

Araujo, S. (2015). 76 apps educacionais gratuitos para usar com tablets por professores do ensino médio. Retrieved from: https://edshelf.com/shelf/sergioaraujo-76-apps-educacionais-gratuitos-para-usar-com-tablets-por-professores-do-ensino-medio (5.07.2017).

Baran, E. (2014). A Review of Research on Mobile Learning in Teacher Education. *Educational Technology & Society*, *4* (17), 17–32.

Chiang, F.-K., Zhu, G., Wang, Q., Cui, Z., Cai, S., Yu, S. (2016). Research and trends in mobile learning from 1976 to 2013: A content analysis of patents in selected databases. *British journal of educational technology*, *47*, 1006–1019.

Classroomaid (2012). The 50 Best Mobile Apps for Teachers. Retrieved from: http://classroom-aid.com/2012/08/21/the-50-best-mobile-apps-for-teachers (5.07.2017).

Docebo (2014). E-Learning Market Trends & Forecast 2014–2016 Report. Retrieved from: https://www.docebo.com/landing/contactform/elearning-market-trends-and-forecast-2014-2016-docebo-report.pdf (10.07.2017).

Education and Culture DG (2011). Supporting growth and jobs. An agenda for the modernisation of Europe's higher education systems. Retrieved from: http://ec.europa.eu/dgs/education_culture/repository/education/library/policy/modernisation_en.pdf (8.07.2017).

Empowering educators towards Europe 2020 (2011). Retrieved from: http://www.online-educa.com/OEB_Newsportal/empowering-educators-towards-europe-2020 (8.07.2017).

Hart, J. (2016). Top 100 Tools for Learning 2016. Retrieved from: http://c4lpt.co.uk/top100tools (5.07.2017).

Hojnacki L. (eds.) (2011). Mobilna edukacja. M-learning, czyli (r)ewolucja w nauczaniu. Przewodnik dla nauczycieli. Retrieved from: http://edustyle.pl/mobilna-edukacja (6.07.2017).

Komorowski, T. (2013). M-learning – wykorzystanie urządzeń mobilnych w procesie kształcenia – stan bieżący, potencjał i bariery. Retrieved from: https://www.google.pl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&cad=rja&uact=8&ved=0ahUKEwiu_snEhsXVAhXLK8AKHbJ5BcQQFghTMAc&url=https%3A%2F%2Fwww.ur.edu.pl%2Ffile%2F50164%2F07.pdf&usg=AFQjCNHY3wlCJDXbEjHv0TQb6l7D_CFCfA (16.07.2017).

Malinowska, M., Niedzielski, P. (2017). Proces kształcenia a mobile learning – koncepcja i wstępne wyniki projektu Modern. *EduAkcja. Magazyn edukacji elektronicznej*, *1* (13), 65–74.

Modern Project (2017). Mobile & Digital E-learning Toolkit. Retrieved from: http://www.modern.pm (20.07.2017).

Różewski, P., Kusztina, E., Tadeusiewicz, R., Zaikin, O. (2011). *Intelligent Open Learning Systems: Concepts, models and algorithms*. Berlin–Heidelberg: Springer–Verlag.

Sung, Y., Chang, K., Liu, T. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education*, *94*, 252–275.

Zydney, J.M., Warner, Z. (2015). Mobile apps for science learning: Review of research. *Computers & Education*, *94*, 1–17.

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ANALYSIS OF THE DISTRIBUTION SYSTEM CONSTRUCTION COMPANY OFFERING THE SERVICE OF DISTRIBUTION OF FERTILIZER

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Abstract

Logistic systems of enterprises are characterized by individual character, adapted to the type of business and the industry in which they operate, as well as their internal specifics. Shaping the system seeks to determine which entities, as well as the extent to which influence the structure and functioning of distribution channels specific products and the operation of the entire system. In his paper the author will analyze the concepts related to the distribution system and its specificity and, above all, show the way media distribution services of fertilizers on the market.

Introduction

Logistic systems of enterprises are characterized by individual character, adapted to the type of business and the industry in which they operate, as well as their internal specifics. Shaping the system seeks to determine which entities, as well as the extent to which influence the structure and functioning of distribution channels specific products and the operation of the entire system. The market of mineral fertilizers in Poland has a certain specificity,

because the demand side is a large number of entities, while supply is represented mainly by units of the oligopolistic nature, hence, the market is regulating the flow of consumer products. In addition, fertilizer industry is characterized by seasonality and weather changes that is determined by the current financial conditions of final consumers, these factors influence the distribution of the service offered.

Theoretical aspects of the distribution systems

Each enterprise logistics system is characterized by high complexity and specificity, depending on the type of enterprise, the scope of its activities or manufactured goods make up the distribution channels it along with their links, functions and participants. A review of the definition of the distribution system is presented in Table 1.

Table 1. Overview of selected definition of the supply chain

Publication date	Author	Name of the publication	Definition
2009	R.J. Best	Market – Based Management	The system through which the company provides its products is a marketing system, a combination of distribution channels and after-sales efforts
2001	A. Czubała	Dystrybucja produktów	The structure of the distribution system is the distribution channels and physical distribution, the physical flow of products
2000	T. Sztucki	Marketing przedsiębiorcy i menedżera	The distribution enterprises create distribution channels, which are used to a structured flow of products from manufacturers to end customers
2004	T. Kramer	Podstawy marketingu	As part of the distribution system are, on the one hand, activities such as transport, storage, maintenance and refinement of products that are associated with the physical transfer of goods from the producer to the final consumer, on the other activities related to the determination of the number and type of cells mediating in the distribution process, and also set up tasks for each participant in this process

Source: own study.

Therefore, the logistics distribution functions performed by the company are varied (Gołembska, 2010) and different is the number of intermediate links in the logistics process flow of product from the supplier (manufacturer) to the final recipient (Choquet, 2010).

Model distribution system presupposes the existence of the structure of the system in the form of distribution channels, which are the "way to connect and the order in which they appear intermediaries, through which one or more streams of goods" (Garbarski, Rutkowski, Wrzosek, 2000), or "a set of interdependent organizations are involved in the delivery of the product or service to the user" (Kotler, 1994; Stern, El-Ansary, Coughlan, 2002; Czubała, 2001).

Clarifying the distribution channels in a subjective aspect enables to specify its structure, according to two criteria: ownership and participating in a physical movement. Thus, the structure of the distribution channel is as follows (Stern, El-Ansary, Coughlan, 2002):

- participates in the physical movement of goods through the provision of transport, storage or order handling services, transferring ownership rights to individual, downstream producers, wholesalers, individual or institutional customers,
- participants participating in the physical movement of goods but not gaining the right to property during their distribution, such as agents, brokers or sales representatives,

– entities not participating in the physical movement of goods, at the same time not affording the property rights, perform auxiliary functions for the above participants: transport companies, shipping companies, logistics and distribution centers, as well as banking, financial and insurance institutions.

Example configurations indirect distribution models take into account the type of the first participants, who both make buying and selling products, and communicate what ownership to them, Figure 1 shows.

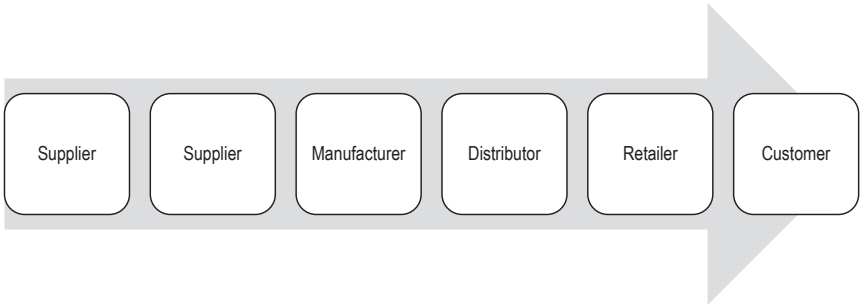

Figure 1. Exemplary scheme of the enterprise system

Source: Coyle, Bardi, Langley (2002).

The structure of the distribution channel used mainly determined by market factors, the properties and characteristics of the product, and the possibility of financial position of the manufacturer and the organizational and legal factors (Śliwczyński, Koliński, 2014).

The construction of the distribution system can be seen two major decision-making problems. The first one is related to the determination method of marketing, ie identifying types of distribution channels in terms of transaction volume. The second decision problem is associated with physical distribution, the choice way to move products from the places of production to places of destination (Gołembska, 2010).

The present scope of the decision related to the design of distribution channels includes findings on the following issues (Altkorn, 2004):

– channel type,
– number of channels,
– channel length,
– channel width,
– the type of participants.

The length of the distribution channel is measured by the number of levels or distribution levels, including more cells, forming a path between the producer and the end client.

Shaping the system seeks to ascertain, first of all, which entities, as well as the extent to which influence the structure and functioning of distribution channels specific products and the operation of the entire system.

Analysis of distribution services in the selected company distributing fertilizers

Decisions related to the building of distribution channels can be both at the discretion of the manufacturer, wholesaler and retailer, but most often are taken by the manufacturer, because of the potential economic advantage. Manufacturer placing your product on the market can choose one or more channels. The choice of one channel can be justified by the individual characteristics of the product, which will decide on the unique control of its distribution. The advantage is the ease towards such a channel in the coordination and control of cooperative relations. A drawback of the low flexibility can be reacted fluctuations of demand and supply, and a low level of reliability, due to a limited number of embodiments of methods of sales (Bowersox, Cross, Cooper, 2006). Another situation caused by the desire to optimize costs through the use of outsourcing services, is taking over the responsibility for the traders distribution processes. The advantage of this solution is taken up by other parts of the cell risk of the product, so that the manufacturing company can concentrate on their "core business", and the development and improvement of the products. Horizontal channel system is the result of decisions about the number and types of intermediaries at the various levels of the channel, the result of it the following strategies for distributing the product on the market (Frankowska, Jedliński, 2011, Śliwczyński, Koliński, 2014):

- exclusive distribution is used to maintain a wide range of service level control by the manufacturer by significantly limiting the number of intermediaries in the channel,
- selective distribution includes selected intermediaries to reach a certain number of recipients, providing the manufacturer with complete control and low costs,
- intensive distribution is characterized by the placing of goods at all possible points of sale, thus enabling the purchase of large groups of buyers in widely accessible and convenient locations.

Constantly increasing competition in the market makes the company was still looking for opportunities to reduce costs of production and supply, and therefore more likely to purchase needed goods on the global market and to move the location of production to countries with low labor costs (offshoring). As a result, enterprise systems are becoming more complex, and the markets increasingly distant supplies. This situation makes it possible to reduce costs, but also increases the likelihood of failure to attain its objectives, thus forming a relationship of trade-off, which is followed by reduction of operating costs while increasing the risk of various types of interference.

A similar situation occurs in the chemical industry, the fertilizer industry. Suppliers and manufacturers of raw materials procured are located in areas where access to raw materials, and thus the production and transport are cheaper. The market of mineral fertilizers in Poland has a particular specificity. On the demand side there is a large number of entities, while supply is represented mainly by units of the oligopolistic nature (Kapusta, 2003), hence, the market is regulating the flow of consumer products. Fertilizer industry is characterized by seasonality and weather changes that is determined by the current financial conditions of final consumers. In addition, modifying factor influencing the functioning of the chain will place the ordered product, the raw materials - the country imported Europe or the Far East.

Mineral fertilizers are delivered to the Polish market mainly through the national chemical industry. In trading with mineral fertilizers on the Polish market dominant role in the case of imports only play potassium fertilizers, because Poland does not have its own deposits of potassium salt. Business is conducted through intermediaries purchasing and distributing agricultural inputs for their own account and risk (Piwowar, 2008). Diagram of the distribution function on the mineral fertilizer market in Poland, determined on the basis of the analyzed company, is shown in Figure 2.

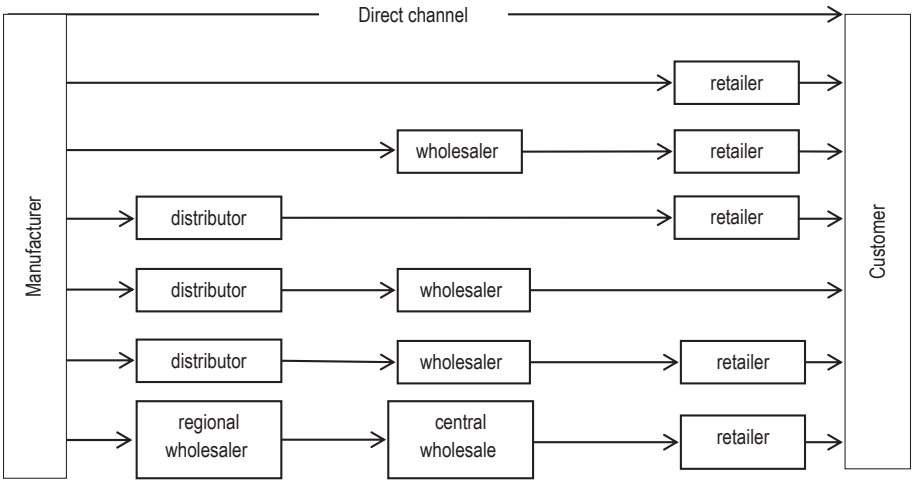

Figure 2. Examples of distribution models

Source: own study.

The results of the study showed that most companies offering the service of distribution of fertilizers in Poland mostly not direct sales and channel the most popular choice, it is a three-level distribution channel, as a distributor, wholesaler and retailer.

Conclusions

Building a distribution system in any industry is always subject to certain risks and uncertainties, because in such a complex system can often come across the events and phenomena bearing signs of randomness, which to the end can't be predicted due to unknown causes them. These challenges largely concerns the fertilizer industry, offering services where the distribution is also subject to weather risk, so the construction of such a system is particularly careful. Therefore, the company offering the service of distribution of fertilizers, opt for longer distribution systems, where it is possible to divide the possible risks. Companies must take action on many levels, create more and more opportunities for cooperation, and in building strategies into the future, but above all on the specific market of fertilizers must pay greater attention to the distribution system modeling and analysis of its environment, both closer and further.

References

Altkorn, J. (2004). *Podstawy marketingu*. Kraków: Instytut Marketingu.

Best, R.J. (2009). *Market – Based Management*. Prentice Hall PTR.

Bowersox, J.D., Cross, J., David Cooper, B.M. (2006). *Supply Chain Logistics Management*. McGrAw HIE.

Choquet, M. (2010). *Logistyka dystrybucji*. Poznań: Euro Logistics.

Coyle, J.J., Bardi, E.J., Langley, C.J. (2002). *Zarzadzanie logistyczne*. Warszawa: Wydawnictwo Naukowe PWN.

Czubała, A. (2001). *Dystrybucja produktów*. Warszawa: Wydawnictwo Naukowe PWN.

Frankowska, M., Jedliński, M. (2011). *Efektywność systemu dystrybucji*. Warszawa: PWE.

Garbarski, L., Rutkowski, I., Wrzosek, W. (2000). *Marketing. Punkt zwrotny nowoczesnej firmy*. Warszawa: Wydawnictwo Naukowe PWN.

Gołembska, E. (2010). *Kompendium wiedzy o logistyce*. Warszawa: Wydawnictwo Naukowe PWN.

Kapusta, F. (2003). *Teoria agrobiznesu*. Wrocław: Wydawnictwo Akademii Ekonomicznej.

Kotler, P. (1994). *Marketing, analiza, planowanie, wdrażanie i kontrola*. Warszawa: Gebethner & Ska.

Kramer, T. (2004). *Podstawy marketingu*. Warszawa: PWE.

Piwowar, A. (2008). Zużycie i relacje cenowe wybranych nawozów mineralnych do ziarna pszenicy. *Journal of Agribusiness and Rural Development*, *2*.

Stern, L.W., El-Ansary, A.I., Coughlan, A.T. (2002). *Kanały marketingowe*. Warszawa: Wydawnictwo Naukowe PWN.

Sztucki, T. (2000). *Marketing przedsiębiorcy i menadżera*. Warszawa: Agencja wydawnicza Placet.

Śliwczyński, B., Koliński, A. (2014). *Organizacja i monitorowanie procesów dystrybucji*. Poznań: Instytut Logistyki i Magazynowania.

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OFFER OF SAIL TRAINING IN THE WEST POMERANIAN PROVINCE IN THE LIGHT OF THE APPLICABLE REGULATIONS

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Abstract

The main aim of the article is to present the current situation on the market of sailing training services in the West Pomeranian Province and to answer the question whether entities that provide such services are necessary when sailing courses are not obligatory anymore.
The first part of the article presents the current regulations on the conditions for obtaining sailing license and the statistics on the number of licenses issued in 2009–2016. Then the offer of selected training centers operating in the West Pomeranian Province is described. In addition to study on the supply, the authors carried out study on the demand. This concerned the reasons why respondents chose to attend a sailing course.

Introduction

Sailing is often described as an example of qualified tourism (Lewczuk, 2009; Lubański, 2005; Pawlikowska-Piechotka, 2003; Piasecki, 2016). According to the definition proposed by T. Łobożewicz (1983, p. 8) qualified tourism is a highly specialized form of tourism, which requires proper preparation from its practitioners. To qualify for this type of tourism, it is often necessary to have a document issued by a competent organization that will confirm

the person's ability. When sailing is concerned, appropriate skills are required only from people who have the yacht they intend to sail, although not always. According to the law currently in force in Poland, a yacht up to 7.5 m in length can be operated without any license. However, it is difficult to disagree with the statement by J. Gospodarek, who notes that sailing is a special form of water tourism and is related to the fulfillment of specific conditions and restrictions resulting from the need to ensure the safety of those who sail (Gospodarek, 2007, p. 151). Every year, many people decide to take sailing license exams, thus gaining the certification to operate their own yachts. These exams are, in principle, a confirmation of their knowledge and skills. It raises the question that becomes a research problem of how they can be passed and whether specialized training centers are needed to do that. In order to solve the problem, there is a need to verify the research hypothesis, which says that changes in legal regulations do does not present a threat for a position of the training centers.

The first part of the article discusses the current regulations governing the rules for awarding sailing licenses.

Then, the statistics on the number of licenses issued by the Polish Yachting Association (PYA) and the offer of selected sailing training centers operating in the West Pomeranian province are presented.

In the next part of the paper the results of a survey conducted among participants in sailing courses organized by selected training centers are presented.

Legal basis for sailing tourism

In Poland there is no single legal act that would regulate all the major issues related to sailing. Regulations in this area are often the result of general provisions on tourism, but also on the use of marine and inland waterways (Łapko, 2015, p. 36). The most important legal acts in respect to the subject of this article are:

1. Inland Waterway Act (Act, 2000), which is a normative act regulating matters related to navigation in inland waterways.
2. Sports Act of 25 June 2010, which introduces Article 37a to the Inland Waterway Act, stating that: *the operation of sport or recreational craft, known as "water tourism", requires*:
   – possessing appropriate knowledge and skills in the field of sailing,
   – adherence to safety rules for water tourism.

   Article 67, para. 3 of the Sports Act contains a very important statement that *practicing water tourism on sailing yachts with hull lengths exceeding 7.5 m or motors with an engine power exceeding 10 kW requires a qualification certificate or license issued by the relevant Polish sports association.*
3. Regulation of the Minister of Sport of 9 April 2013 on sailing, which, as an act implementing the Inland Waterway Act provides requirements for obtaining sailing licenses on the basis of sailing exams (exam methods and fees) and license templates.

It should be noted that in the last decade regulations on the current sailing courses, the scope of their holders' rights as well as the rules regarding their obtaining have changed three times. The current regulation is the most liberal in these matters. The highest license-free requirements have been introduced. At present, yachts up to 7.5 m (previously 5 m) can be operated without any qualifications (Act, 1996, Article 53a, para. 2). In addition, the number of sailing licenses was reduced from 4 to 3 by removing the yacht helmsman license (YH). Remaining licenses are: inland skipper (IS), yacht skipper (YS) and yacht master (YM). The liquidation of the YH license increased the rights of the IS and YS.

Now, the IS license authorizes to operate sailing yachts in inland waterways without restrictions and yachts of hull length up to 12 m in internal sea waters and other marine waters in the zone up to 2 nautical miles from the coast in the daytime. This license can be obtained by a person who has turned 14.

YS license authorizes to operate sailing yachts in inland waters and yachts of up to 18 m long in the sea without limitation. The license may be obtained by a person who has turned 18 and has completed at least two sea cruises of a total duration of at least 200 hours.

The YM license authorizes to operate sailing yachts in inland and marine waters without limitation.

Exams must be passed for IS and YS. The YM is awarded to a person holding a YS license, based on the experience.

The exam consists of a theoretical and practical part. Both must be credited to pass the exam. The theoretical part is a single-choice test with 75 questions, and in the case of the IS license exam, the applicant also has to solve the navigation task.

The practical part of the exam is carried out on a yacht. It checks maneuvering skills.

Although the requirement for obtaining IS and YS licenses is passing the exam, for the first time in the post-war history of Poland, the sailing course is not obligatory.

Unfortunately, it has not been possible to obtain accurate figures from the PYA, but it is known that the unchanged difficulty level of the sailing exams makes the vast majority of people taking exams participate in such courses.

While it is possible to master the theory independently and to learn the answers to the test questions, it is almost impossible to master the maneuvering skills properly. It is necessary to learn it from other people with relevant knowledge and experience in this area. In addition, preparation for the practical part of the exam requires access to the yacht.

For this reason, despite the non-obligatory sailing training, there are still many sailing schools on the market and the sailing courses they organize are still popular.

Statistics on the number of sailing licenses issued

The liberalization of the rules on sailing, did not contribute to reducing the number of people willing to acquire sailing licenses. The change in the existing rules on sailing licenses in 2013 makes it difficult to make clear comparisons with previous years, so the data are presented in two tables. At the same time, it is pointed out that the data covers the entire country, and therefore all the naval districts, since no more detailed information could be obtained from the PYA, which would concern only nautical areas of the West Pomeranian Province.

Table 1 shows the number of licenses issued between 2009 and 2011, when the Regulation of the Minister of Sport of 9 June 2006 on sailing was in force (Journal of Laws, 2001, No 81, item 889, as amended). The exams were obligatory for the IS and YH. Sadly, it was impossible to obtain data from earlier periods. Table 1 shows that the number of licenses issued was relatively stable, with much more IS than YH licenses issued. The share of YH licenses in the total number of licenses issued in the analyzed years, however, increased and amounted to: 11.86% in 2009, 13.99% in 2010 and 16.67% in 2011.

Table 1 does not provide data for 2012 because the current regulation has expired and new ones have not yet entered into force, which resulted in the fact that for 9 months there were no provisions specifying the detailed conditions for sailing licenses.

Table 1. Sailing licenses issued in 2009–2011 in Poland

Year	License		
	IS	YH	Total
2009	11,177	1,504	12,681
2010	10,806	1,758	12,564
2011	10,325	1,722	12,047

Source: data of the PYA.

Table 2 shows the number of licenses for IS and YH issued by the PYA in the years 2013–2016, i.e. during the period of validity of the regulation of 9 April 2013 on sailing. According to the data presented, it was only in 2015 that fewer licenses were issued than in previous years, while the record year was 2014.

It is evident that, despite the fact that still more IS licenses were issued, the share of YS licenses was greater than in 2009–2011.

It amounted to: 44.32% in 2013, 42.9% in 2014, 33.08% in 2015 and 25.51% in 2016.

Table 2. Sailing licenses issued in 2013–2016 in Poland

Year	License		
	IS	YS	total
2013	7,287	5,802	13,089
2014	9,499	7,137	16,636
2015	8,056	3,983	12,039
2016	10,803	3,700	14,503

Source: data of the PYA.

For a better illustration this is shown in Figure 1, where the visible trend line shows the increase in the number of IS licenses issued and the decrease in the number of YS licenses issued.

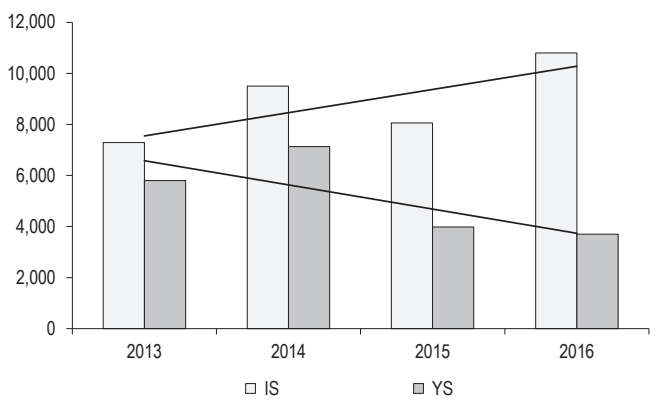

Figure 1. Number of sailing licenses issued in 2013–2016

Source: own study based on data of the PYA.

Apparently it may seem that the data presented for 2013–2016 shows that more and more people are trying to obtain sailing licenses, especially when it comes to YS license. According to figures, despite the falls in 2015 and 2016 there were nearly twice as many applicant as in 2009–2011. Probably, however, such a large number of YS licenses issued in 2014 and 2015 resulted not only from the fact that more people took exams, but also from the fact that the licenses issued under the old regulation were replaced by new licenses. Those who held the YH license, upon request and payment, could automatically obtain a YS license and gain more rights.

This would explain why in the following years there is a decrease in the number of licenses issued – the majority of people who wanted to exchange documents already did it, so the statistics show mainly those taking the exams.

Training offer in West Pomeranian Province

Since sailing courses are no longer obligatory, their organizers are not, as it was in previous years, obliged to report them to the proper sailing association. It is therefore difficult to determine the exact number of centers that are engaged in this activity. Based on the study conducted in June 2017, it was stated that in the West Pomeranian Province there could be as many as 20 of such entities.

Their offer is varied in terms of prices and the form and duration of courses. Depending on needs and skills, applicants may choose several weeks of training, intensive weekly trainings, weekend trainings, training cruises or sailing camps (Gierczyk, 2011, p. 71–72). The standard is that the fee for the exam and the issue of the license is paid separately and is not added directly to the price of the course (Łapko, 2012, p. 405).

Table 3 presents selected training centers in the West Pomeranian Province.

Table 3. Offer of selected training centers in the West Pomeranian Province

Training center	City/Town	Price (zł)		Type	Course duration
		IS	YS		
Szkoła żeglarska Ferajna	Próchnówko	1,350	1,600	Sailing camp; Training cruise	14 days 7 days
Centrum żeglarskie	Szczecin	from800 to 1,200	from900 to 1,045	Weekend; Intensive; Stationery-holiday	1 month 14 days 8 days
Szkoła żeglarska Wiatr	Szczecin	899	1,200	Intensive	7 days
Szkoła żeglarska Wilk Morski	Kołobrzeg	1,050	1,200	Weekend; Intensive	1 month 7 days
Szkoła żeglarska Kubryk	Świnoujście	–	1,650	Intensive	8 days
Szkoła żeglarska Skagen	Kamień Pomorski	1,000	1,200	Intensive	9 days

Source: own study based on http://www.ferajna.pl; centrumzeglarskie.pl; wiatr-szkola.pl; wilkmorski.pl; opensailing.com; kubryk.pl; http://skagen.pl (20.06.1017).

Depending on the type of course chosen, the customer decides on a particular course mode. Standard courses last from 60 to 80 hours. The theoretical part lasts no longer than 20. Training centers conduct courses according to the curriculum recommended by the PYA. Classes always cover both the theoretical and the practical part, although in different forms.

Weekday courses are held on selected days from Monday to Friday. During the weekend course, the group meets every Saturday and Sunday. Intensive sailing courses are held daily and last from 7 to 14 days. During 7-day courses the training centers try to focus on the practical part, while theoretical part is to be mainly learned at home – participants only get access to e-learning platforms, materials in the form of textbooks and CDs, and discuss only selected topics during classes. All necessary materials for study are included in the price of the course.

Another type of course are training cruises, stationary and holiday training or sailing camps. This type of courses offer the possibility to stay on a yacht and spend most of the time on the water, for a cruise of up to 6 days (Nowacki, 2016, p. 75). The price of this type of course includes full or partial board, but often does not include e.g. port fees, yacht cleaning after the course and fuel prices.

The price of sailing courses varies depending on the type of course chosen, the amount of training material, the type of yacht or, for example, extra hours of practice. Often, training centers reduce their course fees at upcoming course dates or for the last places. In addition, most schools declare the possibility of conducting individual training or for a closed group only.

Analysis of demand for participation in sailing training

For the purpose of the article, in June 2017 the authors conducted a survey among participants of sailing courses organized by 3 selected centers operating in the West Pomeranian Province. Two of these centers are located in Szczecin and one in Kamień Pomorski. The survey was conducted with a questionnaire using direct interview technique. The questionnaire was filled by 17 participants. The purpose of the survey was to determine the reasons for the selection of the particular sailing course by respondents and the factors influencing the choice of the school. They were also asked about how to prepare for the exams for the appropriate sailing license.

There were more male respondents (71%). The most representative age group was a group of people aged 30 to 39 (41%), followed by the group of 40 to 49 yo (24%). Youngest people up to 20 years of age accounted for only 18% of all respondents.

Most respondents trained to obtain a YS license (71%).

To the question: Why did you attend a sailing course? most people responded that they want to: yacht themselves (94%), improve their skills (59%), or indicated other reasons: willingness to spend nice free time (47%) and meet new people (29%).

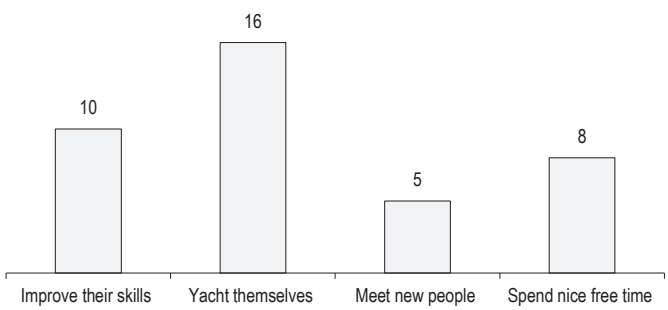

Figure 2. Reasons for attending a sailing course

Source: own study.

The next part of the questionnaire was about preparing for the exam. According to the survey, participants do not seek for knowledge about the range of material they have to master in order to pass the exam by themselves. As many as 88% of the respondents indicated that the course material was the source of their knowledge for the preparation for the theoretical part of the exam. As far as the practical part is concerned, 100% of the respondents said that maneuvering and yachting exercises are the basic way to prepare for the exam. In addition to the course, only 6% of respondents had the opportunity to operate a yacht and practice maneuvers. Only 41% of the respondents reviewed the professional literature and 24% of the respondents used the materials available online. Only 29% of the respondents said that they were familiar with the content of the Regulation of the Minister of Sport and Tourism of 9 April 2013 on water tourism, which provides the range necessary to pass the exam.

When choosing a training center, respondents most often chose it because of the course date (59%), proximity to training center (47%), feedback from friends and online opinions (53%) or used the school services earlier (24%). Interestingly, the price of the course (12%) was the least important reason for choosing the training center.

The results of the study show that the training material delivered during the course is often the only material used by people preparing for sailing exams. The applicants show full confidence in the training center of their choice. Although under the current regulations, sailing courses are not obligatory, they remain the simplest way to prepare for the exam. Selected knowledge, provided by professionals is the easiest to remember. The most important thing, however, is for the sailing schools to offer access to appropriate training yachts where practical training is provided. Obtaining a yacht and practicing maneuvering skills on your own is very difficult. It can therefore be said that the future of sailing schools is not threatened, although obviously a large number of these entities force owners to offer great flexibility in terms of pricing and the training methods.

Conclusions

The article presents the current situation in the market of training services in West Pomeranian province. Although in light of the current regulations governing sailing tourism and the issue of sailing licenses, no training is required before taking the sailing exam, the position of the training centers appears to be safe. The number of sailing licenses issued in Poland is growing, and most of the applicants use the services of sailing schools. They almost completely rely on the theoretical and practical knowledge provided during this type of courses. Participation in the courses provides access to the yacht, where applicants can master the maneuvering skills required for the exam.

A large number of sailing training centers force them to offer a great flexibility. This makes it easy for customers to find the one that best suits their needs and skills.

Acknowledgments

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References

Gierczyk, Z., Ocieczek, B. (2011). Obozy turystyki kwalifikowanej formą aktywności dzieci i młodzieży. *Zeszyty Naukowe Wielkopolskiej Wyższej Szkoły Turystyki i Zarządzania w Poznaniu. Studia Periegetica. Rekreacyjne i zdrowotne aspekty turystycznej aktywności człowieka*, 65–76.

Gospodarek, J. (2007). *Prawo w turystyce i rekreacji*. Warszawa: Difin.

http://pya.org.pl/polski-zwiazek-zeglarski.

Inland Waterway Act 21.12.2000. Journal of Laws 2013, item 1458.

Journal of Laws (2001). Physical Culture Act of 18.01.1996. Journal of Laws No 81, item 889, as amended.

Journal of Laws (2010). Sports Act of 25.06.2010. Journal of Laws No 127 item 857, as amended.

Journal of Laws (2013). Regulation of the Minister of Sport of 9.04.2013 on sailing. Journal of Laws No 0, item 460, as amended.

Lewczuk, B.(2009) Rozwój turystyki kwalifikowanej – żeglarskiej na przykładzie Szczecina. In: Z. Babińsk (ed.), *Przyroda i turystyka regionu Pomorza i Kujaw. Rewitalizacja drogi wodnej Wisła–Odra szansą dla gospodarki regionu* (pp. 59–67). Bydgoszcz: BDW MARGRAFSEN s.c.

Lubański, K. (2005). Wpływ środowiska rodzinnego na aktywność młodzieży w zakresie turystyki kwalifikowanej. *Turystyka i Rekreacja*, *1*, 151–156.

Łapko, A. (2012). Żeglarskie usługi szkoleniowe na przykładzie oferty województwa zachodniopomorskiego. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług*, *96*, 395–408.

Łapko, A. (2015). *Turystyka żeglarska*. Warszawa: BEL Studio.

Łobożewicz, T. (1983). *Turystyka kwalifikowana*. Warszawa: PTTK "Kraj"

Nowacki, M. (2016). Turystyka żeglarska. In: A. Stasiak, J. Śledzińska, B. Włodarczyk (eds.), *Wczoraj, dziś i jutro turystyki aktywnej i specjalistycznej* (pp. 75–87). Warszawa: PTTK "Kraj".

Pawlikowska-Piechotka, A. (2003). Atrakcyjność inwestycji turystycznych a walory środowiska. *Problemy Ekologii*, *3* (7), 136–141.

Piasecki, W., Kliszewski, L. (2016). Rozwój żeglarstwa w lewobrzeżnej części Szczecina. Część I. Sekcja Żeglarska KS „Świt" Skolwin. *Przegląd Zachodniopomorski*, *4*, 175–217.

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NOTIFICATIONS OF DANGEROUS PRODUCTS FROM EUROPEAN UNION COUNTRIES IN THE RAPEX AS AN E-SERVICE

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Abstract

The Rapid Alert System for dangerous non-food products (RAPEX) may be considered as a type of e-service, which combines e-administration, e-education and e-health. The RAPEX enables quick exchange of information between national authorities of the European Union (EU) countries on measures taken against products posing a risk to consumers health and safety. In the period 2005–2016 the notifications in the RAPEX related mainly to products originated from China (57%), however, notifications to products from EU countries accounted for 18% of all notifications. Therefore, the goal of the study was to examine, which product categories from EU countries were most commonly submitted in the RAPEX and which was the dependence between product category and origin country, year, risk level, product user, submitting country, risk type and adopted measures. There were cluster analysis and scatterplots using Statistica 12 and pivot tables using Excel applied. The largest number of notifications was submitted to products from Germany, but also from France, Italy, United Kingdom and Poland. There were mainly motor vehicles (and the number of notifications increased last years) and also clothing, textiles and fashion items, childcare articles and children's equipment, toys and cosmetics. The product user was mainly consumer. The risk level was primarily serious and the risk type was injury. The products were most often submitted by Germany and also Greece and the appropriate measures to products were taken mainly by economic operators.

Introduction

The service, which is provided via the internet can be defined as an electronic service (e-service) (see Szopiński, 2012). The development of e-services is considered by the European Union (EU) as a manifestation of building an information society, an orientation to meet the needs of society and a rising standard of living. The Rapid Alert System for dangerous non-food products (RAPEX) may be considered as type of e-service, which combines

e-administration (use of information and telecommunications technologies in public administration), e-education (use of the internet to obtain information) and e-health (support for all health-related activities) (see Dąbrowska, Janoś-Kresło, Wódkowski, 2009).

The RAPEX enables quick exchange of information between EU countries, Iceland, Liechtenstein and Norway and the European Commission about non-food products found on the market and posing a risk to health and safety of consumers (European Commission, 2017). The legal basis for RAPEX is directive 2001/95/EC on general product safety (European Parliament & Council, 2002). This system covers majority of non-food products, however, products such as pharmaceuticals and medical devices are covered by other alert systems (European Commission, 2014). The information on dangerous products are exchanged between national authorities. The notification is an alert submitted by national authority and concerns measures taken against these products (European Union, 2017).

The RAPEX can be considered as a reactive tool within market surveillance actions (see Alén Cordero, Muñoz Sanz, 2009). The data provided by the RAPEX can be helpful for: customers (wondering about purchase of a product), companies (developing new products or assessing existing ones), consumer organizations (gathering information within tests) and authorities (to reduce risk and to ensure co-coordinated actions) (Rausand, Utne, 2009).

The results obtained from the RAPEX database for the years 2005–2016 indicated that 57% of notifications related to products from China (European Commission, 2017). This problem was noticed, for example, by Wynn, Ouyang, ter Hofstede, and Fidge (2011), who drew attention to toys originating from China and Tse and Tan (2012), who mentioned that most of the recalled products in the United Kingdom were made in China. However, the notifications to products from EU countries were 18% (European Commission, 2017) and were not widely discussed. Therefore, the goal of the study was to examine, which product categories from EU countries were most commonly submitted in the RAPEX and which was the dependence between product category and origin country, year, risk level, product user, submitting country, risk type and measures (adopted by submitting country).

Data and methods

The data originated from the RAPEX database and concerned 3,625 notifications covering the period from 2005 (first year in database) to 2016. The data related to eight variables: product category, origin country, year, risk level, product user, submitting country, risk type and adopted measures.

In order to increase the readability of figures (i.e. scatterplots as mentioned below), it was necessary to adopt certain simplifications. Some values of variable product category were shortened to: „childcare articles…" (name in database: childcare articles and children's equipment), "clothing, textiles…" (clothing, textiles and fashion items), "communication… equipment" (communication and media equipment), "electrical appliances…" (electrical appliances and equipment), "gas appliances…" (gas appliances and components), "kitchen… accessories" (kitchen/cooking accessories).

In case of variables risk type and origin country, due to the possibility of occurring more than one value in one notification, only first value was adopted. In turn, in case of variable adopted measures in one notification was usually one value, however, the values were too varied. Therefore, only two basic values were adopted and they related to adopted measures taken by: public authority or economic operator.

Data has been collected and sorted to eight above mentioned variables in Excel and then transferred to Statistica 12. In case of tree clustering (joining) the following settings were adopted: linkage rule: Ward's method,

distance measure: Euclidean distance. The Ward's method uses analysis of variance and is regarded as very efficient. The dependences between variable product category and other variables were examined using pivot tables in Excel (not presented) and (bubble) scatterplots in Statistica. The values of the variables that occurred more often were presented as larger bubbles.

Results and discussion

The results of tree clustering were presented in Figure 1. They indicated the similarity in occurrence in pairs the values of variables: year and risk type and risk level and product user. In the case of the first pair it was associated with the occurrence of a large number of notifications in recent years (see also Figure 3). In turn, in the case of the second pair, this was due to the fact that each of both variables (risk level and product user) had only two values (see also respectively Figures 4 and 5), so they were not differentiated.

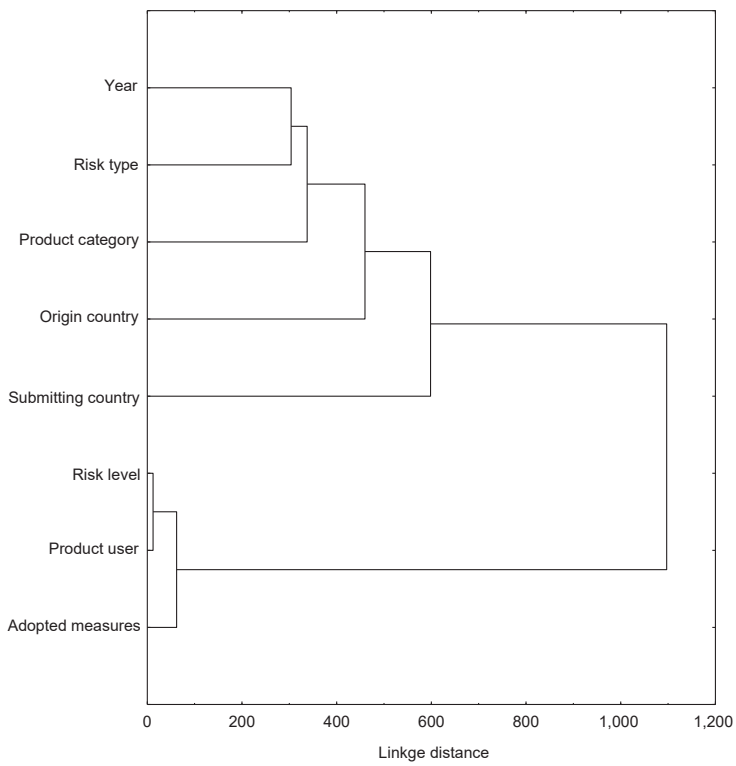

Figure 1. Tree diagram

Source: own study.

The largest number of notifications was submitted to following categories: motor vehicles (1351; 37%), clothing, textiles and fashion items (429; 12%), childcare articles and children's equipment (321; 9%), toys (297; 8%) and cosmetics (248; 7%) (European Commission, 2017; European Union, 2017), see also Figures 2–8.

The dependences between product category and origin country presented in Figure 2.

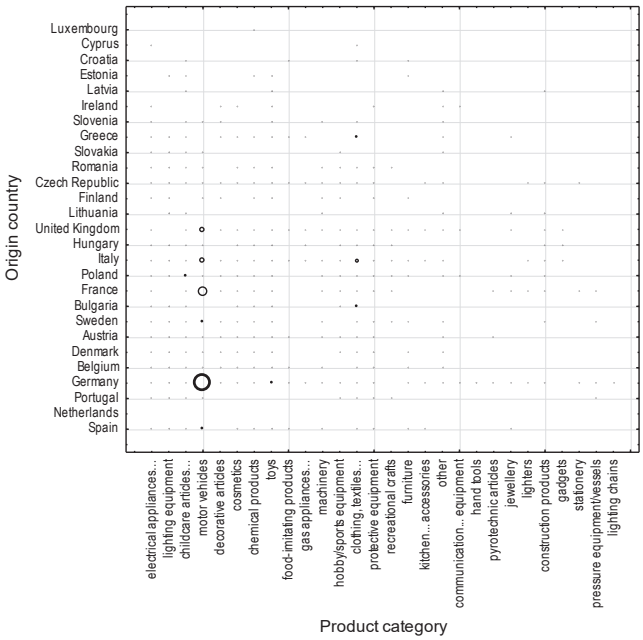

Figure 2. The dependence between product category and origin country

Source: own study.

The largest number of notifications was submitted to products from Germany (825; 23%), and also to products from Italy (517; 14%), France (392; 11%), United Kingdom (312; 9%) and Poland (277; 8%).

Notifications to motor vehicles were most visible and to products from Germany were 461 notifications, i.e. about 13% of all notifications, France – 266; 7%, United Kingdom – 169; 5%, Italy – 154; 4% and Sweden – 81; 2% (see Figure 2). In case of clothing, textiles and fashion items most notifications related to products from Italy (101; 3%), Bulgaria (92; 3%) and Greece (63; 2%). Most products submitted within category childcare articles and children's equipment originated from Poland (81; 2%), Italy (51; 1%) and Germany (34; 1%), in case of toys – from Germany (79; 2%), Italy (31; 1%), Netherlands (31; 1%), Spain (31; 1%) and Poland (30; 1%) and in case of cosmetics – from Germany (43; 1%), France (36; 1%) and Italy (35; 1%).

The dependences between product category and year presented in Figure 3. The highest number of notifications was submitted in 2016 (478, 13%), but over 300 notifications (about 9%) were submitted also in 2015, 2014 and earlier in 2012, 2010, 2009 and 2008.

The dependences between product category and risk level presented in Figure 4. The significant part of notifications related to a serious risk – 3545; 98%.

The dependences between product category and product user presented in Figure 5. The majority of notification related to products for consumers – 3549; 98%.

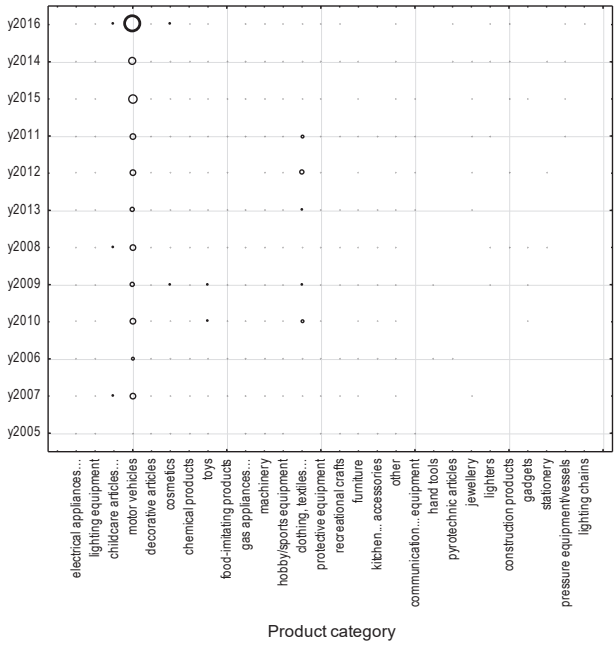

Figure 3. The dependence between product category and year

Source: own study.

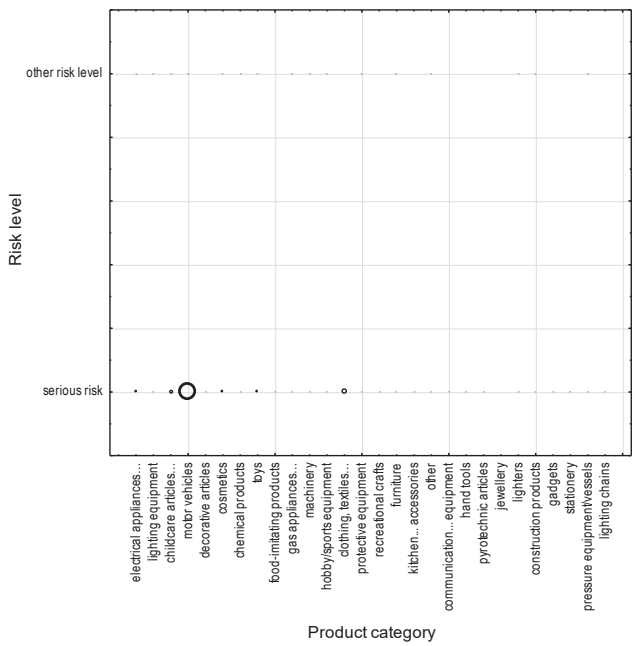

Figure 4. The dependence between product category and risk level

Source: own study.

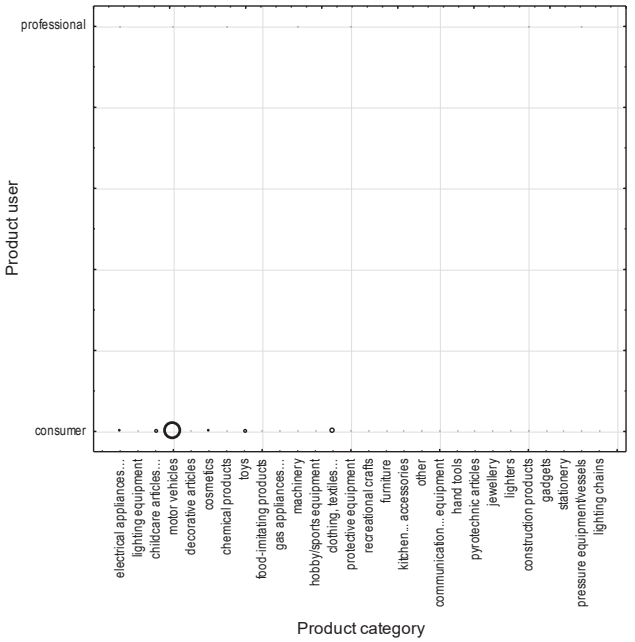

Figure 5. The dependence between product category and product user

Source: own study.

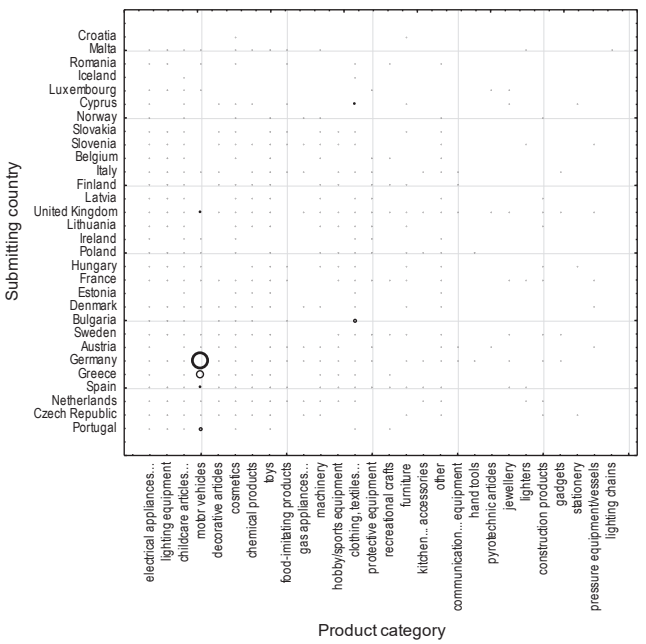

Figure 6. The dependence between product category and submitting country

Source: own study.

The dependences between product category and submitting country presented in Figure 6. Products were submitted mainly by Germany – 825; 23% and also by Greece (358; 10%), France (246; 7%), Spain (240; 7%) and United Kingdom (228; 6%).

The dependences between product category and risk type presented in Figure 7. The risk type in almost half of notifications was injury – 1691; 47% and also chemical (528; 15%), fire (338; 9%), choking (320; 9%) and electric shock (235; 6%).

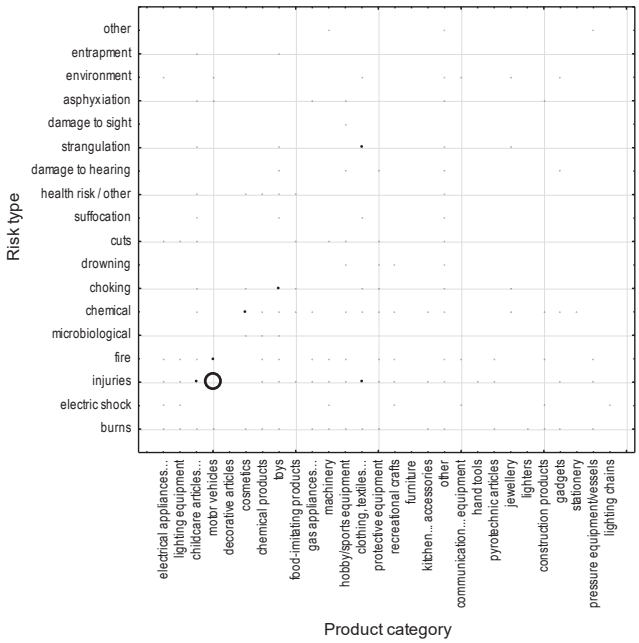

Figure 7. The dependence between product category and risk type

Source: own study.

The dependences between product category and adopted measures to submitted products presented in Figure 8. In more than two third of cases the adopted measures to submitted product were adopted by economic operators (2483; 68%) and they were: recall of the product from end users, voluntary corrective actions taken by the manufacturer and withdrawal of the product from the market (European Commission, 2017).

Pose-Juan, Fernández-Cruz and Simal-Gándara (2016) listed similar as above mentioned most frequently submitted products in the RAPEX: toys, motor vehicles, clothing, textiles and fashion items, childcare articles and children's equipment and also electrical appliances (this last category could have been a result of taking into account products from China). Liepiņa and Korabļova (2014) mentioned about RAPEX notifications on toys. The notifications to cosmetics were indicated by Martin et al. (2011) and Pauwels and Rogiers (2010) directly mentioned about chemical risks in cosmetics. Orford, Crabbe, Hague, Schaper and Duarte-Davidson (2014), without indicating particular products, mentioned about following risks in RAPEX notifications: chemical, but also electrical and

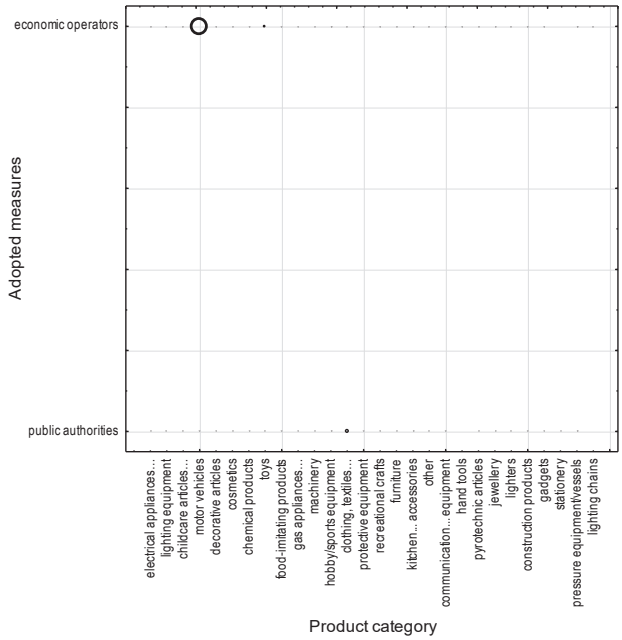

Figure 8. The dependence between product category and adopted measures

Source: own study.

choking. Klaschka (2017) drew attention to the RAPEX notifications related to the chemical risk in personal care products. She added, however, that only health effects considered as serious lead to recall products from consumers. Duarte-Davidson et al. (2014) mentioned that relevant national authorities should be aware of chemical contamination incidents within the RAPEX.

Conclusions

The Rapid Alert System for dangerous non-food products (RAPEX) ensures rapid exchange of information on dangerous products between national and European Union (EU) authorities and also provides these information in the open access way. Therefore, this system may by considered as a type of e-service (combining e-administration, e-education and e-health) not only for consumers (customers), but also for: producers, distributors, sellers (economic operators), consumer organizations and authorities.

About 18% of notifications in the RAPEX in 2005–2016 related to products from EU countries. There were mainly notifications on motor vehicles from Germany, but also from France, United Kingdom, Italy and Sweden. The other product groups were: clothing, textiles and fashion items from Italy, Bulgaria and Greece, childcare articles and children's equipment from Poland, Italy and Germany, toys from Germany, Italy, Netherlands, Spain and Poland and cosmetics from Germany, France and Italy.

The highest number of notifications was submitted in 2016. The significant part of notifications related to a serious risk for consumers, not professionals. Products were submitted mainly by Germany and also by Greece, France, Spain and United Kingdom. The risk type was injury, but it were also chemical risks, fire, choking and electric

shock. The adopted measures were taken mainly by economic operators and they were: recall of the product from end users, voluntary corrective actions of the manufacturer and withdrawal of the product from the market.

The RAPEX as an e-service could be developed by, for example, sending information to consumers in the given EU country related to dangerous products by email, sms or via a smartphone application. Such information should include the exact product name and description and also cover the name of the manufacturer and seller. It would increase the consumer's awareness and safety and would also eliminate unfair business practices on the market.

References

Alén Cordero, C., Muñoz Sanz, J.L. (2009). Measurement of machinery safety level: European framework for product control: Particular case: Spanish framework for market surveillance. *Safety Science*, *10* (47), 1285–1296.

Dąbrowska, A., Janoś-Kresło, M., Wódkowski, A. (2009). *E-usługi a społeczeństwo informacyjne*. Warszawa: Difin.

Duarte-Davidson, R., Orford, R., Wyke, S., Griffiths, M., Amlôt, R., Chilcott, R. (2014). Recent advances to address European Union Health Security from cross border chemical health threats. *Environment International*, *72*, 3–14.

European Commission (2014). Memo/14/214. RAPEX in 2013. Brussels: European Commission.

European Commission (2017). Rapid Alert System for dangerous non-food products. Retreived from: http://ec.europa.eu/consumers/consumers_safety/safety_products/rapex/alerts/repository/content/pages/rapex/index_en.htm (18.05.2017).

European Parliament & Council (2002). Directive 2001/95/EC of 3 December 2001 on general product safety. OJ L 11, 15.1.2002, 4–17.

European Union (2017). *Rapid Alert System for dangerous products. Working together to keep consumers safe. 2016 annual report*. Luxembourg: Publications Office of the European Union.

Klaschka, U. (2017). Trust, but verify! Personal care products in the rapid alert system database RAPEX. *Sustainable Chemistry and Pharmacy*, *5*, 30–41.

Liepiņa, R., Korabļova, L. (2014). Market Surveillance of Toys: Situation Assessment and Improvement. *Procedia - Social and Behavioral Sciences*, *Volume 156* (26), 360–364.

Martin, M., Christiansen, B., Caspari, G., Hogardt, A. J., von Thomsen, M., Ott, E., Mattner, F. (2011). Hospital-wide outbreak of Burkholderia contaminans caused by prefabricated moist washcloths. *Journal of Hospital Infection*, *3* (77), 267–270.

Orford, R., Crabbe, H., Hague, C., Schaper, A., Duarte-Davidson, R. (2014). EU alerting and reporting systems for potential chemical public health threats and hazards. *Environment International*, *72*, 15–25.

Pauwels, M., Rogiers, V. (2010). Human health safety evaluation of cosmetics in the EU: A legally imposed challenge to science. *Toxicology and Applied Pharmacology*, *2* (243), 260–274.

Pose-Juan, E., Fernández-Cruz, T., Simal-Gándara, J. (2016). State of the art on public risk assessment of combined human exposure to multiple chemical contaminants. *Trends in Food Science & Technology*, *55*, 11–28.

Rausand, M., Utne, I.B. (2009). Product safety – Principles and practices in a life cycle perspective. *Safety Science*, *7* (47), 939–947.

Szopiński, T. (2012). *E-konsument na rynku usług*. Warszawa: CeDeWu.

Tse, Y.K., Tan, K.H. (2012). Managing product quality risk and visibility in multi-layer supply chain. *International Journal of Production Economics*, *1* (139), 49–57.

Wynn, M.T., Ouyang, C., ter Hofstede, A.H.M., Fidge, C.J. (2011). Data and process requirements for product recall coordination. *Computers in Industry*, *7* (62), 776–786.

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RECOGNIZING EARLY WARNING SIGNS IN TRANSPORTATION SERVICES

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Keywords transport, service, oversize cargo, early warning, project, logistics project

Abstract

The transport services can vary in complexity, and can be carried out in short or long supply chains. Market observations indicate that logistics services including transport service become increasingly sophisticated, by far exceeding their traditional perception. They begin to resemble projects characterized by singularity, uniqueness, temporariness, limited budget, and, occasionally, innovativeness. Therefore, they are often treated as a specific type of projects, called logistics projects. The aim of the paper is to present the essence and characteristics of transportation services as a specific logistics project. Author characterizes the transportation service, with particular focus on the sector of oversized cargo transportation. The demand for such services depends on the industry, energy, infrastructure development, investment projects in particular countries as well as on economic policies. Transportation of non-standard cargos creates non-standard problems. The management of such services requires specific knowledge, resources, and managers. The paper identifies key factors that need to be taken under consideration when planning oversized cargo transportation services, i.e. early warning signs. The author presents certain barriers to responding to early warning signs in oversize transport service.

Introduction

An early warning sign is an observation, a signal, a message, or some other form of communication. It is or can be seen as expression, indication, proof, or sign of the existence of some future or incipient positive or negative issue. Early warning signs are signals, omens, or indications of future developments (Nikander, 2002). These signs are possible to identify in organizations (Haji-kazemi, 2015; Williams, Klakegg, Walker, Andersen, Magnussen,

2012). It is possible to detect early warning signs in projects including logistics project undertaken by organizations and by supply chains. Recognizing early warning signs is an integrated element in project management practices. The research reviews (Williams et al., 2012) shows that project professionals are not good at detecting or acting on early warning signs. Williams and his research team (2012) have found little evidence that project managers have found ways to exploit early warning signs to identify and deflect future problems, the appropriate responses on early warning signs in projects are missing from project managers in many cases.

The basic service on the logistics market, arising out of the need for moving various goods from their collection point to their destination, is transportation. Transportation services are an integral part of logistics systems. Transportation services are very important in the world. They are a basic element of logistics services. These kind of services comprise all relevant interdependencies between production, transfer, and consumption and are integrated into the value chains of senders and receivers (Gleissner, Femerling, 2013). Transportation services are provided by many companies with a various scope of offers, knowledge, experience, teams, equipment, scope of operation and size. Both large and small companies function on this market, companies providing diversified services, starting from a typical transport service, through shipping, storage, packaging and customizing, packing, to a complex service for entire supply chains on the domestic and international scale (Wiktorowska-Jasik, 2016). Oversize transport is a special one of these services. This kind of service is the application of limited resources, competences including knowledge and skills by one entity for the benefit of another. Management of such services is similar to project management. Oversized transportation can be treated as a specific project called logistics project. Logistics project is a non-routine set of task apart from other projects by time and cost, the purpose of which is to perform a singular, and unique action that effects change to the logistics system of a one enterprise or a supply chain within which this enterprise operates (Pisz, Łapuńka, 2016).

The purpose of the paper is to analyze the oversized transportation services in terms of the complexity. The particular attention was paid to the early warning concept in such orders. The paper presents the impact of recognizing early warning signs on the project's success. The similarity of transportation services to logistics projects was depicted. Barriers to early warning signs in oversize transport service were presented based on literature review and studies in three companies of oversize transport.

Oversized transportation services

The world needs innovative transportation services. Logistics operations, in which transport services are included should be sustainability. Economic practice shows that large third-party logistics (3PL) providers have usually environmental sustainability goals (Lieb, Lieb, 2010). From the other hand new technologies in communication and robotics have a substantial influence on transportation (Fries, Chowdhury, Brummond, 2009). These technologies have given rise to the prospect of autonomous vehicle (AV) technology which aims to reduce crashes, energy consumption, transportation cost, pollution, and congestion while at the same time increasing transport accessibility (Bagloee, Tavana, Asadi, Oliver, 2016).

Transportation services cause movements of people or goods. The market of transport services is a complex structure whose efficiency of operation depends on the integration of systems: physical movement, information flow, payments and general conditions for concluding transactions (Wiktorowska-Jasik, 2016). We can distinguish between internal and external transportation services. Internal transportation services, for instance, occur within a plant among different departments of a warehouse. External ones take place between suppliers and customers or

between plants and warehouses. Companies use their own vehicles (private haulage) or logistics service providers to carry out transport services (Gleissner, Femerling, 2013).

One kind of transportation service is oversize transport. These kind of service is dedicated to movements of oversized goods (Figure 1). Oversize transport is usually a very important part of every development project, including infrastructure projects, construction projects, production projects, etc. Oversized transportation is a big part of industry, energy, infrastructure development (Gabor et al., 2011).

Figure 1. An example of oversize transport service execution

Source: own elaboration.

Oversize transport is a special one of service type. This kind of service is the application of limited resources, competences including knowledge and skills by one entity for the benefit of another. Oversized transportation is a unique subset of transportation services. These kind of services span the boundaries between suppliers and customers and have become increasingly important to successful supply chain operations. These sets of activities is very essence of many business. Oversize transport services can vary in complexity, and can be carried out in a company (production company) or in a supply chain. Market observations indicate that these kind of services become increasingly sophisticated, by far exceeding their traditional perception. It significantly affects the economic development of each country, where, however, various regulations and solutions are in use (Gabor et al., 2011; Pisz, Łapuńka, 2016). Oversize transport begin to resemble projects characterized by singularity, uniqueness, temporariness, limited budget, and, occasionally, innovativeness. The majority of orders received by logistics service providers constitute separate and singular transportation processes, which necessitate detailed analysis, planning as well as appropriate management methods. Therefore, they are often treated as a specific type of projects, called logistics projects. In order to fulfill the order it requires dedicated, and thus costly equipment. It must be emphasized that in the case of mass transportation, a range of ready-made semitrailers can be readily purchased, whereas in the case of non-standard transportation – these must be ordered beforehand (e.g., in road transportation – multi-axis modules are typically ordered approximately two years in advance). Entrepreneurs specializing in oversized cargo transportation are required to anticipate future market situation as well as the directions of economic development. For instance, a particular enterprise must assess whether or not it requires multi-axis semitrailers and to what kind of cargo will they be dedicated – low or high, long or extendable, perhaps heavy, etc. Transportation company undertaken these kind of project is expected to be able to suitably configure the vehicle and the semitrailer designed for the transportation of such cargos, since there is no single applicable standard. Such a configuration is particular to a given transportation order. Non-standard cargo transportation is carried out with suitably fitted vehicles, the carrying capacity, structure, and labeling of which are usually different from those of standard means

of transportation. In order to organize the transit of such vehicles, appropriate permits are required, as well as advance arrangements with appropriate infrastructure administrators. This involves obtaining specific permits and decisions of authorized entities. The non-standard cargo creates non-standard problems. Transportation these kind of load is executed under risk and uncertainty. This includes transportation of special loads (abnormal loads, oversized cargo), which can be considered highly problematic and therefore requires special care. The process of its management is similar to project management, especially logistics project management.

Carrying out a logistics service in the context of oversized cargo transportation displays features of a logistics project. It constitutes a group of diverse activities, the aim of which is to meet requirements in terms of time, cost and scope. Oversized cargo transportation is the final element in a long chain of specialist logistics operations. It requires an appropriate approach, the use of suitable methods and equipment. From the perspective of an employer, i.e., an entrepreneur responsible for delivering oversized cargo, an order to deliver such cargo is a unique undertaking, which requires an individual approach. This necessitates an assessment of the market of oversized cargo transportation, selecting a logistics operator based on the chosen assessment criteria, and commissioning the organization and execution of oversized cargo transportation. In order to carry out such a logistics service, a contractor, i.e., a logistics operator, must prepare thoroughly, must possess or rent appropriate equipment, as well as demonstrate knowledge and experience in this type of transportation. It is essential to determine the feasibility of transportation, analyze all possible means of transportation, and choose the optimal one, and to assess and select loading and unloading equipment. Moreover, it is necessary to analyze available means of transportation and all permissible routes of oversized cargo transportation, and to select the optimal route. A logistics operator should make plans for loading, unloading and securing individual elements of the cargo, and determine the possible approaches for protecting the cargo against external conditions.

Early warning signs in oversized transportation projects

An important challenge in planning, execution and control of the undertaken logistics project like oversize transport in intra- and cross-company in supply chains is the capability to react to unforeseen deviations and disruptions. Oversize transport is the last link of a long chain of specialized logistic operations. The service providers have to make careful preparations, provide for proper equipment and have right experience in oversize cargo carriage. For the entire operation to be successful, the appropriate routes have to be selected along with the right vehicles, and the plan for loading and securing each oversize cargos have to be drawn up. Vehicles adjusted to carry oversize cargo generally have the dimensions; load capacity, design and marking that differ from standard vehicles. Cargo handling equipment has much higher lifting capacity than cranes or other machines handling standard items.

Besides, to arrange a smooth movement of the oversize cargo carrying vehicle, one needs special permits and other arrangements with transport infrastructure managers concerning the route, and, naturally, cargo has to be insured. If the transport is international, the operator has to satisfy the requirements of the region to be crossed, which sometimes is very difficult.

The basic functionality of early warning systems consists of detecting the event and quickly warning the users. Early warning system as a tool is concerned with looking into the future of the process or project which is always uncertain, and discussing what it might mean for decision-making in the present or in the future (Haji-Kazemi, 2015). The ability to react in real-time to hazards and disturbances, especially within time-critical processes, becomes

more and more important for many enterprises and supply chain (Genca, Duffieb, Reinharta, 2014; Wieland, Wallenburg, 2013).

In this context the availability of real-time data concerning current events in the logistics and supply chain of logistics project execution is essential. Therefore research in the field of early warning system of projects including logistics project management is becoming more and more important. By being alert to the early warning signs, corrective actions can be taken in sufficient time to avoid adverse safety consequences. Companies must pay attention to sign of potential weaknesses (Weintrit, Neumann, 2013). Therefore the early warning signs should be identify in this kind of logistics project, in project life cycle, at decision gates/other milestones. We should note that the front end phase is an effective time to look for early warning signs in all projects, including oversize transportation. Roots of problems in later project phases of project life cycle are found in processes and decisions at the front-end of projects. During front end phase and especially during project execution phase some of warning signs can be omitted. It can be results of intense and distracting activity of project. We can observe that the original warning signals may have been conveniently ignored or intentionally hidden by project team and stakeholders. From other side some actions may be too late to avert when the warning signals are recognized.

Project assessment as a typically part of gateways is a useful tool in identifying early warning signals of the project. The ability to reflect on what happens (good and bad) in undertaken project is crucial for stakeholders including: sponsors, owner, project managers, team members, and assessors. Post-project lessons learned can be used to identify early warning signs. The reports should contain information about problems experienced that could be used for early warnings in the new project in the future. We should note that converting lessons learned/post-project reviews into either specific checklists of possible problems or more open lists of possible areas of concern can provide new projects with direct sources of early warning system (Williams, 2007). Postmortem analyses of unsuccessful projects are also good source for early warning signs. Postmortem analyses are generally conducted at the end of the project process, but are also useful at the end of each stage of a multi-phase project. The feedback gathered from project postmortem will be used to improve the management of future projects and should be used for building knowledge about final failure. These kind of analyses gives the project team a chance for calm reflection of the overall undertaken project, to talk about what went well and what could be done better next time in future projects. Figure 2 illustrates the main sources early warning signs detected by many persons and organizations and associations being part of a given projects – oversized transportation projects. The signals are detected based on project practice and the project environments. The information came from many sources. The signs are visible and invisible. The early warning signs are detected based on systematic use of project management tools and techniques and on project stakeholders' gut feelings.

Traditionally, time, cost, scope and quality are most highly rated as measures of project success (Klakegg, Williams, Walker, Andersen, Magnussen, 2010). Many researchers and practitioners consider success, performance and effectiveness as synonyms (Belout, 1998). It can be treated as the degree to which objectives are achieved (Baccarini, 1999; Belout, 1998). Success is corresponding to the effectiveness and the efficiency of the project and Brudney and England claim that efficiency is broadly understood as the maximization of output for a given level of input or resources. Various aspects of success were assessed: project efficiency (measured by the project management triangle), the project's impact on the client (measured by client satisfaction level), organization success (measured by the actual impact of project outcomes on the organization), as well as future-proofing (measuring how well project outcomes were aligned with the strategic goals of a company) (Mir, Pinnington, 2014).

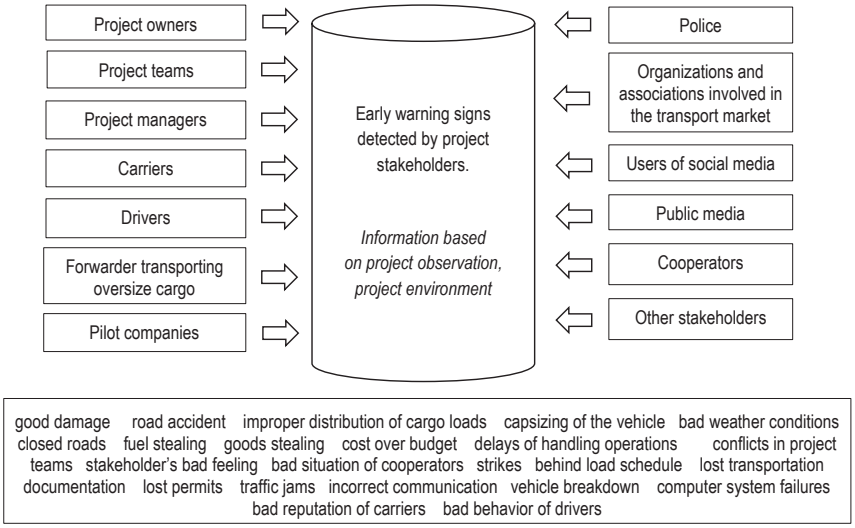

Figure 2. Early warning signs detected in oversized transportation projects

Source: own elaboration.

Project success factors are consequences of many undertaken activities under risk and uncertainty, incidents, and other conscious or unconscious actions, or even lack of actions (Meyer, 2016). For the purpose of early warning in projects, there must be additional measures that can be provide relevant information. Project success is much more than simply success in these dimensions (Klakegg et al., 2010). Nevertheless, to date success has in principle been measured by business results. Today, we can note an evolution of project success concepts.

Barriers to responding to early warning signs in oversize transport projects

It is very important to known possible barriers to responding to early warning signs in projects of oversize transport. Based on the literature review and research findings, the author depicts certain possible barriers to the detection of early warning signs in projects including oversize transport projects. The available literature regarding the identification of possible sources of EW signs within projects has been examined in sources: (Bartsch, Ebers, Maurer, 2013; Flyvbjerg, Holm, Buhl, 2002; Flyvbjerg, Rothengatter, Bruzelius, 2003; Flyvbjerg, Garbuio, Lovallo, 2009; Hofstede, 1984; Klakegg et al., 2010; Lovallo, Kahneman, 2003; Williams et al., 2012).

The practice study has been carried out by the author based on form of interview. Project managers in three companies – specialist of transportation services were asked to depict the barriers to responding to early warning signs in transportation orders treated as logistics projects. Project managers and project teams usually make decisions based on own knowledge rather than on a rational weighting of gains, losses, and probabilities. Because of limit time they are forced to make fast decision. We can find some difficulties for acting due to lack of time to think ahead and question assumptions – the orders are limited by the schedule. The undertaken transport projects are usually very complexity. Interviewers pointed out that logistics project like oversize transport services are characterized by a high level of complexity, both in technical and organizational terms. The services are executed with cooperation with another companies (companies specialized in escorting heavy transport, permits,

loading, etc.) and institutions (transport ministries, police, etc.). The data needed for decision making are imprecise, not crisp. Project situation is involved with flux and unpredictability and large amount of unknown unknowns. Because of large optimism of project team and project managers and owner of logistics providers usually cost are underestimated, benefits are overestimated, the potential for problems and miscalculations are overlooked. We can observe that project teams take their experience to the next project and fail to recognize the need to secure the ability of an organization to learn. The interviewed managers did not prepare right analysis of lessons learned. Form the other hand the project managers belief that the project assessments would capture all problems. Transportation services treated as logistics project are executed by projects team. The success of project is in their hands. They usually work in trust conditions. From the other hand the trust atmosphere can provide to hide the bad habits and practices. The drivers can steal fuel, the pilots can added kilometers, etc. It creates unreasonable costs of the project. The literature review and interviews show that sometime we can observe political pressure exerted by the project owners to implement a given solution. The interviewers underline that organization complexity can be one of barrier to responding to early warning signs in transportation orders.

Conclusions

The paper treated about early warning signs in specific transport services which are similar to unique type of projects. Orders for oversized transportation can be treated as specific projects named logistics projects. Transportation services such like oversize cargo transport are crucial to develop such sectors as industry, power supply or infrastructure. They make up an important part in any major investment project in companies and in supply chains.

Particular attention was paid to sources of early warning sing detected by stakeholders projects of oversize transport. The main actors of early warning signs were presented. The examples of early warning signals were shown. Additionally the main barriers to responding to early warning signs in projects of oversized transportation were presented on based on survey. The survey was executed in a chosen oversized transportation companies.

References

Bagloee, S.A., Tavana, M., Asadi, M., Oliver T. (2016). Autonomous vehicles: challenges, opportunities, and future implications for transportation policies. *Journal of Modern Transportation*, *4* (24), 284–303.

Baccarini, D. (1999). The logical framework method for defining project success. *Project Management Journal*, *4* (30), 25–32.

Bartsch, V., Ebers, M., Maurer, I. (2013). Learning in project-based organizations: The role of project teams' social capital for overcoming barriers to learning. *International Journal of Project Management*, *31*, 239–251.

Belout, A. (1998). Effects of human resource management on project effectiveness and success, toward a new conceptual framework. *International Journal of Project Management*, *1* (16), 21–26.

Flyvbjerg, B., Holm, M.S., Buhl, S. (2002). Underestimating costs in public works projects: Error or lie? *Journal of the American Planning Association*, *3* (68), 279–295.

Flyvbjerg, B., Rothengatter, W., Bruzelius, N. (2003). *Megaprojects and risk: An anatomy of ambition*. New York, NY: Cambridge University Press.

Flyvbjerg, B., Garbuio, M., Lovallo, D. (2009). Delusion and deception in large infrastructure projects: Two models for explaining and preventing executive disaster. California Management Review, *2* (51), 170–193.

Fries, R., Chowdhury, M., Brummond, J. (2009). *Transportation Infrastructure Security Utilizing Intelligent Transportation Systems*. John Wiley & Sons Inc.

Galor, W. (ed.) (2011). *Carriage and securing of oversize cargo in transport*. Szczecin: Maritime University of Szczecin.

Genca, E., Duffieb, N., Reinharta, G. (2014), Event-Based Supply Chain Early Warning System for an Adaptive Production Control. *Procedia CIRP*, *19*, 39–44.

Gleissner, H., Femerling, J.C. (2013). *Logistics*, Springer Texts in Business and Economics, Switzerland: Springer International Publishing.

Haji-Kazemi, S. (2015). *The Early Warning Procedure in Projects. Foundations, Approaches and Challenges*. Trondheim: Norwegian University of Science and Technology.

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (2nd ed.). Beverly Hills, CA: SagePublications Ltd.

Klakegg, O.J., Williams, T., Walker, D., Andersen, B., Magnussen, O.M. (2010). *Early Warning Signs in Complex Projects*. Newtown Square, PA: Project Management Institute.

Lieb, K.J., Lieb, R.C. (2010). Environmental sustainability in the third-party logistics (3PL) industry. *International Journal of Physical Distribution & Logistics Management*, *7* (40), 524–533.

Lovallo, D., Kahneman, D. (2003). Delusions of success: How optimism undermines executives' decisions. *Harvard Business Review*, July, 56–63.

Meyer, M.D. (2016). *Transportation Planning Handbook*. John Wiley & Sons Inc.

Mir, F.A., Pinnington, A.H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. *International Journal of Project Management*, *32*, 202–217.

Nikander, I.O. (2002). Early warnings: A phenomenon in project management. *Doctoral dissertation*. Espoo, Finland: Helsinki University of Technology.

Pisz, I., Łapuńka, I. (2016). Transportation Services as Specific Logistics Projects for Oversized Cargo in Poland. In: M. Bąk (ed.), Transport Development Challenges in the Twenty-First Century: Proceedings of the 2015 TranSopot Conference, Springer Proceedings in Business and Economics (pp. 139–160), Springer.

Weintrit, A., Neumann, T. (eds.) (2013). *Marine navigation and safety of sea transportation: STCW, maritime education and training (MET), human resources and crew manning, maritime policy, logistics and economics matters*. London: Taylor & Francis Group.

Wieland, A., Wallenburg, C.M. (2013). The influence of relational competencies on supply chain resilience: a relational view. *International Journal of Physical Distribution & Logistics Management*, *4* (43), 300–320.

Wiktorowska-Jasik, A. (2016). Market of transport services – attempt at structural-functional identification. *European Journal of Service Management*, *2* (18), 55–61.

Williams, T.M. (2007). *Post-project reviews to gain effective lessons learned*. Newtown Square, PA: Project Management Institute.

Williams, T., Klakegg, O.J., Walker, D.H.T., Andersen, B., Magnussen, O.M. (2012). Identifying and acting on early warning signs in complex projects. *Project Management Journal*, *2* (43), 37–53.

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SERVICES AND CREATING VALUE FOR CUSTOMERS – MARKETING APPROACH

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Abstract

Perceiving enterprise marketing through the prism of value provided to customers is already a well-established approach to management expertise, including the field of marketing. The article addresses the role of services in the delivery of this value. The aim of the article is to review the state of research in this area based on scientific analysis of Polish and foreign journals. The result of the study is the identification of various research approaches to exploit the potential inherent in the service in order to create and provide value to the customer. In further research on the business model and competitiveness of enterprises, it is possible to develop an innovative concept of so-called service dominance logic in marketing.

Introduction

Value for the customer can be considered in the context of the business model adopted by the company. In the light of research in the area of management, it can be stated that there is a wide range of business model concepts, and it is difficult to clearly indicate the elements that determine its success. The most frequently cited elements of business models are: the position of the enterprise in the value chain, customer value, sources of

revenue, competitive strategy, resources, competencies, external relations, products and services offered, costs (Obłój, 2002; Gołębiewski, 2008; Jabłoński, 2013). The success of a specific business model is combined with the proposition of value for customers, which means that it creates value for the customer and ensures its delivery. The tool for the implementation of the business model is the strategy of the organisation and marketing strategy associated with it.

The article focuses on the potential of a marketing approach to customer value creation, which is most often perceived as a relation between the benefits provided by the product and all the costs associated with acquiring the benefits of the product (Hawkins et al., 2004; Horovitz, 2006). The purpose of this article is to present the role of services in the process of creating and providing value to the customer, starting with the narrow view in which the service is perceived as one of the elements of a more or less extensive offer for the customer, to the innovative concept, presented in the new concept of the logic of domination in service marketing (Vargo, Lusch, 2004).

The result of research into the role of service in the creation and delivery of value for customers is to identify new approaches that leverage service-based capabilities and to identify directions for desired changes in business models and in building a competitive advantage for contemporary businesses.

Literature review

Nowadays, marketing is defined as broadly understood management of the value creation process for the customer in order to achieve a certain competitive position in the market (Doyle, 2003; Kotler, Keller, 2012). Its main three streams include: creation and delivery of value for the customer (Doligalski, 2013), customer value management (Kumar, 2010) and customer perception of value (Gronroos, 2007).

One of the main streams of research in this area is customer value management, with the emphasis on its process character by indicating the following four stages of this process:

- defining value for the customer,
- value creation,
- value communication,
- providing value (Szymura-Tyc, 2004).

The first stage, i.e. defining value, leads to establishing the core value offered to the customer, i.e. determining the product/service characteristics that are the basis of the benefits provided to the customer relative to the price and other costs borne by the customer. The package of customer value should be well adapted to the resources and competencies of the company, it should distinguish the company from the competition and provide value for the company in the long run.

The next stage, creation of value for the customer, involves making decisions and coordinating actions that facilitate the physical processes of creating the basic and additional values for the customer. They are held both inside the organisation and outside in cooperation with partners and suppliers. At this stage, attention is drawn to the need to interact with the customers and encourage them to contribute to the final offer (value). In practice, it means customer relationship management, customer coaching, and sharing knowledge with the customer, so the end product/service meets the high level of customer expectations.

The third stage, communicating value to the customer, is supposed to build an organization's image and the product/service offer, as well as establish long-term customer relationships. Private, group and mass communication tools are used here, with an increasing share of new technologies and the Internet.

The last step, providing value to the customer, means customer service in a specific form, location, time, and agreed terms of payment.

At each of the mentioned stages of the customer value management process there is room for services as essential components of the offer of benefits for the customer. However, the question remains, what role do they play? Referring to the so-called customer value map, we can see a number of instances where services are the source of this value.

The value map of the above-mentioned authors includes the following types of benefits for the customer (Dobiegala-Korona, Doligalski, 2010):

- tighter adaptation of the product to individual needs and expectations (*value of function*),
- choice of form; this value gives customers the choice of shape, size, styling, equipment, convenience of use (*value of form*),
- availability of the offer at a time convenient to the customer or whenever they need it (*value of time*),
- delivery of the products to a place that is convenient for purchase or where the consumer needs it (*value of place*),
- differentiation of the means of transferring the right to use the product from the seller or producer to the customer (*value of possession*); this can be a form of purchase for cash, leasing, credit sales supplemented by the company's taking over the formalities involved in acquiring a loan, etc.,
- adaptation of information about the offer, terms of use of the product, purchase conditions etc. to individual customer needs, and answering the customer's inquiries whenever they are voiced, e.g. 24/7 (*value of communication*),
- education of customers in order to help them maximise the use of product features (*value of education*),
- customer experience in the periods prior to purchase and during product life (*value of experience*).

When exploring the level of value provided to the customer, it is important to be aware that it is the result of a subjective evaluation of the benefits received and the costs by the customer.

Method

As a result of the critical analysis of the literature will be identified four approaches to the components that create value for the customer in the field of services. This analysis shows the evolution in the development of the theory of creating value for the customer in service sector, including the new approach (Service Dominant Logic). The article is based on publications that make a significant contribution to the development of knowledge about service management focused on the customer value creation and available in the EBSCO database.

Results

First approach – The value for the customer in specific services is created in the sphere of unique resources and competencies of the service provider and, subsequently, elements of service, which are difficult to copy, by the competition. This is typical for the **resource-related approach** in management. An example of such an approach is the study of specific service providers whose strategies are focused on customer satisfaction and customer loyalty. The results of these studies pertain to various service industries. For example, in the services of Polish tourist offices, customer value is associated with: quality of the offer, price, quality of customer service, professionalism of employees, reputation of the office (Chlipała, 2009), whereas in the case of low-cost Ryanair services, the value

for the customer is a result of an extensive network of flight connections, competitively low ticket prices, passenger safety (Liczmańska et al., 2016).

Second approach – Value for the customer is perceived through a structural model that includes four levels of value: basic value (core product, basic benefit), additional value (e.g. complementary services), value extended by customer service, e.g. design, consulting, financial services and commercial services. It is also a **resource-related approach with elements of a relational approach**. It has the potential for additional value for the customer through the services added to the offered products. What enriches the existing approaches of the structural model is the recognition of customer service and relationships as distinctive elements of value creation for the customer. In practice, this is typical for the commercial sphere, where companies compete through their specialised customer service at every stage of the sales process and cooperate with specialised service providers. An example of such a strategy is the collaboration of Swedish Ikea with American Apple to provide customers with a unique mobile app which allows the "testing" of furniture in the space of the apartment. The technologically advanced application utilises Augmented Reality and is available on Apple's mobile devices.

Third approach – The value for the customer in the field of services considered in the context of the creation and development of system products. It is **a process and relational approach**. By describing the characteristics of system products, L. Żabiński's (2012) draws attention to such features as: satisfying complex needs (e.g. complex leisure needs), high innovation (including technological advancements), the need to cooperate with many entities in the process of product creation and sale, often globally, as well as positive brand value. A particular feature of system products is, therefore, to provide value to the customer by satisfying the complexity of their needs and expectations rather than the needs and expectations associated with them.

An example of the development of system products is the residential property market in Poland and the so-called developer multi-product, which is the offer of a "city within the city." The idea is to create multifunctional buildings with the future of residents in mind, which means the use of large spaces where people can live, work, shop and actively spend their leisure time. Implementing such an offer requires the developer's cooperation with a number of environmental entities to ensure the fulfilment of all the complex needs of the inhabitants of such a "city" – the system product (Pluta-Olearnik, 2015).

Fourth approach – The value for the customer is perceived in the light of the so-called **Service Dominant Logic.** It is a concept developed by S.L. Vargo and R.F. Lusch (2004). The core of this concept is the idea of co-creation, which is the opposite of Goods Dominant Logic. According to the above-mentioned authors, the value of any products (material goods and services) for the customer is created while they are consumed, and the producers' offers are only propositions of value. The Service Dominant Logic concerns not only typical service companies but also the providers of material goods.

This concept defines service as "the application of specialised competences, knowledge and skills in the process of undertaking activities, processes and activities for others" (Vargo, Lusch, 2004; Edvardsson et al., 2011). Due to the limitations of internal intangible resources, companies must reach for outside sources (customers and business partners) and marketing is responsible for configuring these resources. In subsequent years, service logic concept was the subject of numerous conceptual publications as well as a relatively small number of quality empirical studies.

The pioneers of research in Poland were J. Mazur and P. Zaborek (2014a), who published the methodology and results of quantitative empirical research in Polish and foreign journals, raising a visible interest and discussion

among international researchers. The authors analysed whether the implementation of service logic had positive results for Polish companies, measured by the increase in customer loyalty. In these studies, the attributes of service logic were measured by twenty-three observable variables, including five hidden variables representing **enterprise involvement in service logic**: 1) orientation on intangible assets; 2) creating conditions for dialogue; 3) stimulating dialogue with customers and between them; 4) orientation on long-term relationships; 5) customer experience management (2014). The obtained results proved that service companies, in contrast to production companies, show greater commitment to service logic. However, in the "advanced" segment of enterprises called "True Service Logic," 62% of service enterprises and 38% of manufacturing companies were recorded. Significant statistical differences identified in the study concerned three of the six factors (hidden variables):

- more successful creation of conditions for dialogue – two-way communication with customers,
- more successful stimulation of dialogue with customers and between customers, especially through the use of modern media (e.g. the Internet),
- greater focus on management of customer experience rather than product offers (Mazur, Zaborek, 2014b).

The results of these studies have confirmed the hypothesis of the economic (financial) validity of the implementation of service logic in enterprises. The authors also point out that the growth of the Internet has strengthened the position of consumers in the market, and large companies have recognised the opportunities which arise from treating consumers as co-creators of value, as suggested by Prahalad and Ramaswamy (2004) in their works about the future of competition.

Conclusions

The article presents the evolution of approaches to understanding the role of services in the context of management of value for the customer. The next approaches developed with the increase in marketing knowledge, i.e. the use of intangible assets, the co-creation of value with the customer, and the building and maintenance of relationships as elements of establishing a competitive advantage for the company.

By learning the customer value creation process, the enterprise can more successfully identify customer expectations and, more importantly, it can identify problems the customer does not see. By resolving these problems, the supplier can offer the customer more value than the competitor. Creation and delivery of value to the customer in marketing processes is a prerequisite for building a competitive advantage, and in relation to services, it primarily requires the development of customer relationships (Siemieniako, 2017). In light of the latest service concept, market dominance in the marketplace provides customers only with value proposition in the form of products or services, while value for the customer is revealed in the process of utilising them. This represents a breakthrough in the meaning of the process of creating (contributing) and providing value to the customer in the market not only of services but also of material goods.

Finally, by adopting the point of view of the business model, it is worth to quote the opinion of B. Dobiegała-Korona (2006) that a customer value management strategy to ensure high customer value is a critical part of the enterprise. Investments in the customer must be treated as long-term return strategies. Investments undertaken in the current period will bring benefits in the future. The more precisely the customer groups are identified on the basis of their expectations and generated value for them, the better tailored will be customer value strategies, and the strategies for the increased value of customers for the enterprise will be more effective.

References

Chlipała, P. (2009). Wartość dla klienta jako płaszczyzna budowania relacji przedsiębiorstwo usługowe – klient. *Zeszyty Naukowe Uniwersytetu Szczecińskiego 558. Ekonomiczne Problemy Usług*, *41*, 27-37.

Dobiegała-Korona, B. (2006). Wartość klienta czy wartość dla klienta. *Kwartalnik Nauk o Przedsiębiorstwie*, *1*.

Dobiegała-Korona, B., Doligalski T., (eds.) (2010). *Zarządzanie wartością klienta. Pomiar i strategie*. Warszawa: Poltext.

Doligalski, T. (2013). *Internet w zarządzaniu wartością dla klienta*. Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej.

Doyle, P. (2003). *Marketing wartości*. Warszawa: Felberg SJA.

Edvardsson, R.N. et al. (2011). Does service dominant design result in a better service system? *Journal of Service Management*, *2* (22).

Gołębiewski, T., Dudzik, T., Lewandowska. M., Witek-Hejduk M. (2008). *Modele biznesu polskich przedsiębiorstw*. Warszawa: Szkoła Główna Handlowa.

Grönroos, Ch. (2007). *In Search of New Logic for Marketing. Foundations of Contemporary Theory*. London: John Wiley & Sons, Ltd.

Grönroos, Ch. (2008). Service logic revisited: Who creates value? and who co-creates*? European Business Review*, *4* (20).

Hawkins, D.I., Best, R.J., Coney, K.A., Koch, E.C. (2004). *Consumer Behavior Building Marketing Strategy*. New York: McGrowHill.

Horowitz, J. (2006). *Strategia obsługi klienta*. Warszawa: PWE.

Jabłoński, A. (2013). *Model biznesu. Myślenie strategiczne*. Warszawa: Difin.

Kotler P., *Marketing*.Poznań: Rebis.

Kotler, P., Keller, K.L. (2012). *Marketing*. Poznań: Rebis.

Kumar V, (2010) *Zarządzanie wartością klienta*. Warszawa: Wydawnictwo Naukowe PWN.

Liczmańska, K., Kuczyńska, M. (2016). Wartość dla klienta jako główny element biznesu linii lotniczych Ryanair. *Acta Universitatis Nicolai Copernici*, *3*, 202–205.

Mazur, J., Zaborek, P. (2014). Czy usługodawcy stosują logikę usługową w marketingu? *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *353*, 25.

Mazur, J., Zaborek, P. (2014a). Logika usługowa a lojalność klientów. In: A. Czubała, P. Hadrian, J.W. Wiktor (eds.). *Marketing w 25-leciu gospodarki rynkowej w Polsce* (pp. 544–552). Warszawa: PWE.

Obłój, K.(2002). *Tworzywo skutecznych strategii*. Warszawa: PWE.

http:// bussinesinsider.com.pl technologie/nowe-technologie/ikea (5.04.2017).

Pluta-Olearnik, M. (2015). Real estate development multi-produkt. *Journal of Economics and Management, University of Economics in Katowice*, *4* (22), 142.

Prahalad, C.K., Ramaswamy, V. (2004). *The future of competition: Creating unique value with customers*. Boston: MA: Harvard.

Siemieniako, D. (2012). *Logika usługowej dominacji w marketingu – podstawowe pojęcia i konsekwencje w zarządzaniu*. Retrieved from: https://www.academia.edu (4.05.2017).

Szymura-Tyc, M. (2005), *Marketing w procesie tworzenia wartości dla klienta i przedsiębiorstwa*. Katowice: Akademia Ekonomiczna.

Szymura-Tyc, M. (2004). Marketing we współczesnych procesach tworzenia wartości dla klienta i przedsiębiorstwa. *Acta Universitais Lodziensis, Folia Oeconomica*, *179*, 207–213.

Vargo, S.L., Lusch, R.F. (2004). Evolving to a New Dominant Logic for marketing. *Journal of Marketing*, *1* (68).

Żabiński, L. (ed.) (2012). *Marketing produktów systemowych*. Warszawa: PWE.

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SIMILARITY OF THE EUROPEAN UNION COUNTRIES IN TERMS OF GRADUATES' FIELDS OF EDUCATION

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Abstract

The purpose of the paper is to divide the European Union countries into groups of most similar distributions of graduates' fields of education. The study covers three education levels – bachelor's, master's, doctoral – and ten different fields. As a measure of the degree of similarity of distributions *D* statistic was used, which is the maximum absolute value of the difference between two cumulative distribution functions. Data from 2015 were used for computations. On the basis of the values of the *D* statistic calculated for each of the pairs of distributions the countries were divided into relatively uniform classes. The implemented procedure enabled to distinguish one compact cluster of countries in the case of the bachelor's level of education, two unlike sets in the case of the master's level and one relatively homogenous group in the case of the doctoral level.

Introduction

Knowledge is readily recognized as one of the main drivers of economic development, and countries which are able to make best use of knowledge are more successful on the global market (Aubert, Reiffers, 2003). As can be seen from the overview of empirically based studies, it is clear that the overall economic performance of modern

economies is increasingly and more directly based upon their knowledge stock and their learning capabilities (Neef et al., 2011).

First and foremost, the twenty-first century is characterised by constant change. Moreover, we are living in an age of continuous innovation. Curiosity and creativity are the crucial motivating forces for all innovations. In the contemporary world, a new paradigm of multidimensional development is emerging that embracing economic, cultural, technological and social aspects at both the macro and micro levels. Central to the paradigm is the fact that creativity and access to information are more and more recognised as powerful engines driving economic growth and promoting development in all other dimensions. Creativity in this context refers to the formulation of new ideas and to the application of these ideas to produce functional creations, scientific inventions and technological innovations, as well as original works of art and cultural products. The best outcomes come from creativity in management, arts, science & technology combined together, and an eclectic mix of them is vital for multidimensional development stimulated by innovations (United Nations, 2008, pp. 4–9).

The role of education in the knowledge-based economy is outstanding (Cunningham, Jaaniste, 2010). What is very important, as D. Kirk (2010) argues, the transmission of knowledge through formal education is a good foundation for building a creative economy. It is also worth adding what D.P. Baker (2012, p. 97) has aptly noted: formal education not only transforms individuals, it reconstitutes entire societies. However, learning is not merely the precondition for innovation, technological progress, and the over-hyped rise of an information economy; it is also the precondition for imagination, civic courage, and collective struggles that expand and deepen the process of democratisation.

As the capacity of people to work creatively in the context of sustained innovation is emerging as a central feature of the economy today, higher education institutions must be in some measure estuaries in support of innovation (Araya, 2010, p. 22). Unfortunately, most who have commented on the university's role in the economy believe the key lies in increasing its ability to transfer research to industry, generate new inventions and patents, and spin off its technology in the form of start-up companies. As such, there has been a movement around the world to make universities "engines of innovation" and to enhance their ability to commercialize their research (Feller, 1990; David, 1997). Universities have largely bought into this view because it makes their work more economically relevant and as a way to bolster their budgets. However, this view misses the deeper and more fundamental contributions made by the higher education institutions to innovation, the larger economy, and society as a whole (Florida et al., 2010, p. 45). Technology is, indeed, very important, but the role of the universities encompasses much more than just the generation of technology.

Objective, research tasks and methodology

It is easy to find that the twenty-first century is the time of educational expansion in the European Union countries, especially the expansion of mass higher education. Additionally, there is a great diversity of education fields in each Member State at all three levels of higher education. Hence, the identification of the EU countries that are characterized by very similar graduates' field of education distributions, and those countries which differ from others in terms of the distribution of the discussed variable, has become the objective of this paper. The objective was achieved by carrying out the following research tasks: 1) selecting a statistic that allows for making comparisons

of distributions; 2) determining the values of this statistic for each pair of distributions; 3) dividing the analysed countries into groups with similar field of education distributions.

The study was accomplished separately for the bachelor's, master's and doctoral level of education and covered the following fields: 1. education, 2. arts and humanities, 3. social sciences, journalism and information, 4. business, administration and law, 5. natural sciences, mathematics and statistics, 6. information and communication technologies, 7. engineering, manufacturing and construction, 8. agriculture, forestry, fishery and veterinary, 9. health and welfare, 10. services. All calculations were carried out based on Eurostat database. Data for 2015 were used.

In the study conducted in this paper the authors have used an original conglomerate of statistical tools, namely, the maximum absolute value of the difference between cumulative distribution functions and the dendrite method. The dendrite method is admittedly well known method of classification, but in this study it has been applied in an innovative way.

The considered qualitative variable is the field of education. The cumulative distribution function F fully defines the distribution of the variable in a given population (Turczak, Zwiech, 2016). Hence, the comparison of distributions of the variable in two populations can be reduced to the comparison of values of cumulative distribution functions in these populations, and if two populations have the same distribution, the values of their cumulative distribution functions have to be identical in all points (Razali, Wah, 2011).

Let the first population contain n_1 elements, and the other – n_2 elements. Then F_1 and F_2 stand for cumulative distribution functions regarding the first and the second population, respectively. The scale of differences between the values of these functions is the subject of the further analysis. The values of the cumulative distribution functions had to be calculated for each i-th category of the variable according to the formulas (Turczak, Zwiech, 2015, p. 104):

$$F_{1,i} = n_{1cum,i}/n_{1,i}; \qquad F_{2,i} = n_{2cum,i}/n_{2,i}$$

In the next step for each i-th category the absolute value of the difference between the cumulative distribution functions was determined and the largest one – labelled as $D_{1,2}$ – was indicated. Thus, the measure $D_{1,2}$ was defined as (Arnold, Emerson, 2011, p. 34):

$$D_{1,2} = \max_i \left| F_{1,i} - F_{2,i} \right|.$$

Thanks to the classification procedure the set of twenty eight countries can be divided into subsets that are relatively uniform with respect to the adopted criterion. Such a division is desirable, in which the value of D statistic calculated for any pair of countries belonging to the same group is less than the value of the statistic for any pair of countries belonging to different groups. The classification procedure was carried out in the following stages:

Stage 1. On the basis of the values of D statistic for each country the country most similar was found. Then the dendrite was built composed of vertices and lines. The construction of the dendrite was started by joining each country with the most similar one. As a result of such a joining procedure a graph consisting of first order clusters was created in which countries were connected to one another by lines in a direct or indirect way. More than one first order cluster was obtained and therefore it was necessary to carry out the second stage.

Stage 2. At that stage for each first order cluster the most similar one had to be found. As the value of the D statistic referring to a pair of clusters, the minimum value of this statistic calculated for countries belonging to

these two clusters was assumed. Consequently, by joining each first order cluster with the most similar one, the second order clusters were formed. The described procedure was repeated until all clusters were connected.

Stage 3. The number of groups the dendrite should be divided into can be determined by comparing the lengths of its lines with the threshold value $\hat{D}$. As the threshold value $\hat{D}$ the arithmetic mean of the D statistics calculated for all the 378 pairs of countries can be assumed. The pairs of countries for which the inequality $D > \hat{D}$ is satisfied can be recognized as similar. Conversely, those pairs of countries for which the relation $D \geq \hat{D}$ is fulfilled are considered to be dissimilar and therefore cannot be placed in the same group. Finally, the lines corresponding to distances exceeding the $\hat{D}$ value have to be removed from the dendrite.

Countries similar as regards the distribution of education fields at the bachelor's level

The completion of the first and the second stage of dendrite method led to formation of the connected graph presented in Figure 1.

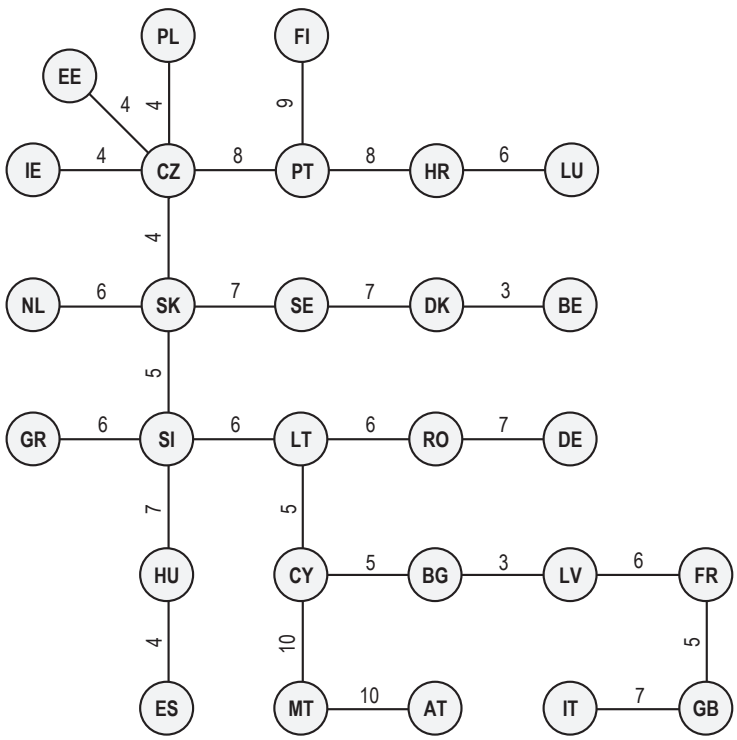

Figure 1. The dendrite constructed for the bachelor's level of education (distances in p.p.)

Source: own compilation based on Eurostat database (access: 10.07.2017).

The threshold value is 14.7 p.p. All distances in Figure 1 are smaller than 14.7 p.p. It means it is not necessary to delete any lines in the graph – all the EU countries constitute a relatively homogeneous set.

Countries similar as regards the distribution of education fields at the master's level

Now the task is to examine which of the Member States have alike distributions concerning the fields of master's level education. Based on the *D* values the graph in Figure 2 was drawn.

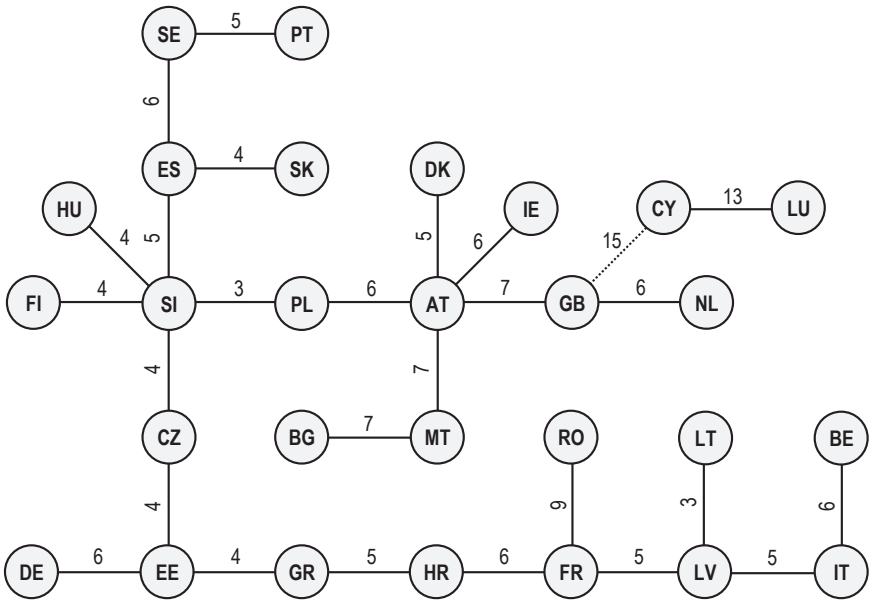

Figure 2. The dendrite constructed for the master's level of education (distances in p.p.)

Source: as in Figure 1.

The threshold value amounts to 13.9 p.p. It is easy to notice that only one distance in Figure 2 is greater than 13.9, namely that of length equal to 15 p.p. It means the line corresponding to this value has to be eliminated from the connected dendrite (in Figure 2 this line in question is depicted as the dotted one). Thus, the division results in the creation of one 2-elements group and one 26-elements group.

Countries similar as regards the distribution of education fields at the doctoral level

The connected dendrite is illustrated in Figure 3.

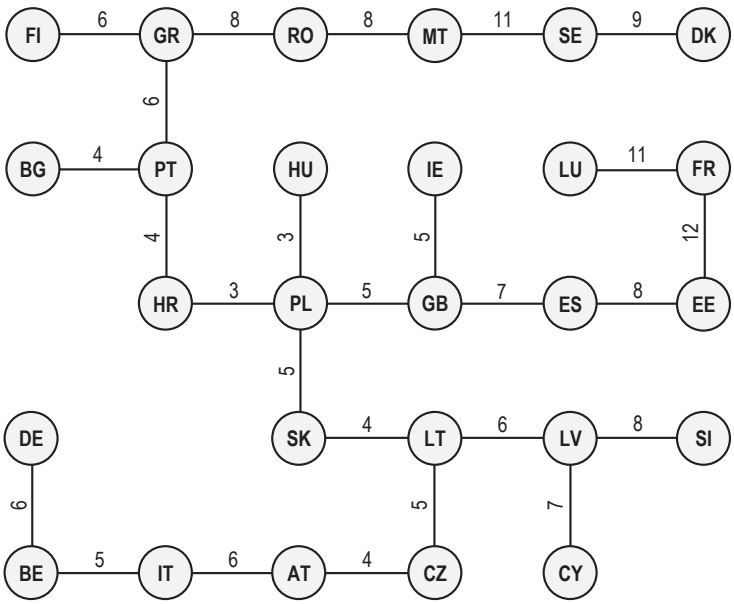

Figure 3. The dendrite constructed for the doctoral level of education[1] (distances in p.p.)

Source: as in Figure 1.

The threshold value is 15.6 p.p. Due to the fact that all distances in Figure 3 are shorter than 15.6 p.p., there is no need to remove any lines from the graph. Hence, it can be assumed that the EU countries covered by the study form a compact collection and should not be split into smaller groups.

Conclusions

Knowledge is the key driver of economic growth and the major determinant of competitiveness on the globalized market (Corno et al., 2000). D. Rooney (2010) has rightly stated that the comparative advantage is increasingly based on the creative use of knowledge. In fact, innovations are produced by human imagination and, as such, are the main factor of multidimensional development of modern economies (Gürüz, 2011).

The defining characteristic of the creative economy is transdisciplinarity: the interaction, translation, and synthesis of knowledge between and among technical, cultural, social and other disciplines, and also between different subdisciplines within each. According to G. Hearn and R. Bridgstock (2010) innovations that reach

[1] Netherlands has been excluded from this study because the data concerning fields of doctoral education in Netherlands have been not recorded.

the market are rarely the products of single disciplines, but rather they involve compound multidisciplinary knowledge regimes. Indeed, modern corporations, for instance, may be most distinguished by their ability to bring together composite knowledge (e.g., scientific, marketing, and legal one). It is extremely important to realize that commercialisation depends on "whole product value propositions", not just basic research in one or two disciplines. Creativity is found across the technological, economic, and artistic domains, in diverse forms such as patents and designs, and also in the areas of entrepreneurship and business administration. "No intellectual domain or economic sector has a monopoly on creativity" (Mitchell et al., 2003, p. 18). Even the classical economists emphasized many times that the wealth of nations is not only the derivative of effective operating on the market, but also depends on how individual skills, talents, and motivations are utilised (Leśniewska, Pluta, 2011). There is no doubt that – since the paradigm of creative economy so strongly promotes diversity – the natural sciences & engineering, arts & humanities, economics & sociology and all other fields should be involved in forming and developing the creative economy.

The role of the higher education institutions in the process of transition of today's economies into the creative ones is invaluable. However, it has to be noted that universities' role goes far beyond just technology – they play a significant role also across the other axes of multidimensional development.

There has been a huge expansion of higher education in the European Union countries, especially over the last several years. Furthermore, there is a great variety of fields of study in all the Member States. Hence, the aim of the paper was to determine the degree of similarity between the EU countries in terms of the distribution concerning graduates' fields of education and to single out countries alike in that respect. In order to accomplish this task, for each pair of the Member States the maximum absolute value of the difference between cumulative distribution functions was computed and then the dendrite method was employed.

When it comes to the bachelor's and doctorial level of education, all the European Union countries are quite similar in respect of graduates' fields of education. However, in the case of the master's level the Member States have to be split into two clusters of alike distributions. The first class comprises Cyprus and Luxembourg, and the second one consists of the other twenty six EU countries. Table 1 presents information on the mean distributions in each of the specified groups.

Table 1. Structural patterns in the isolated groups (%)

Field of education	Level of higher education			
	bachelor's	master's		doctoral
	all (28)	{CY, LU}	other (26)	all (27)
Education	9.3	30.7	10.4	3.0
Arts and humanities	12.6	5.5	9.7	12.2
Social sciences, journalism and information	11.1	4.8	10.7	8.6
Business, administration and law	22.3	41.1	26.5	8.1
Natural sciences, mathematics and statistics	7.6	2.6	7.2	28.0
Information and communication technologies	3.9	2.7	3.0	4.3
Engineering, manufacturing and construction	14.0	6.3	15.0	15.0
Agriculture, forestry, fishery and veterinary	1.6	0.4	1.6	2.9
Health and welfare	13.5	4.8	13.6	17.1
Services	4.0	1.1	2.2	0.7
Total	100.0	100.0	100.0	100.0

Source: as in Figure 1.

Here are the characteristic features of the defined groups:

1. At the bachelor's level the most popular is 'business, administration and law', wherein 15.9% of people have graduated in 'business and administration', 3.7% – in 'law', and 2.6% – in 'inter-disciplinary programmes'.
2. In the case of Cyprus and Luxembourg, the master's degree graduates most often have finished 'business, administration and law': 37.4% – 'business and administration', 3.1% – 'law', and 0.5% – 'inter-disciplinary programmes'. What is also specific for these two small countries, as many as 30.7% of students have graduated in 'education' (mainly 'teacher training' – 25.2%).
3. In the set of remaining twenty six EU countries, the share of 'business and administration' graduates in the total number of master's level graduates is 17.8%, the share of 'law' – 7.0%, and the share of 'inter-disciplinary programmes' – 1.8%.
4. People who have been studying at the doctoral level most often have completed the 'natural sciences, mathematics and statistics' field (28.0% in total), in particular: 'physical sciences' – 12.9%, and 'biological and related sciences' – 9.8%.

In conclusion, it is worth emphasizing that present students have to be prepared to tackle not only the known, but also the unknown problems they will face. That is why it is so important to foster creativity in the 21st century higher education. The role of modern education should be to inspire curiosity, to create an environment where creativity can bloom, to encourage students to be more involved in learning, to allow them to discover new things and to develop their individual skills. This is because the creative economies need to be based on people's use of their creative imagination.

References

Araya, D. (2010). Educational policy in the creative economy. In: D. Araya, M.A. Peters (eds.), *Education in the creative economy. Knowledge and learning in the age of innovation* (pp. 3–28). New York: Peter Lang Publishing.

Arnold, T.B., Emerson, J.W. (2011). Nonparametric goodness-of-fit tests for discrete null distributions. *The R Journal*, *2* (3), 34–39.

Aubert, J., Reiffers, J. (2003). *Knowledge economies in the Middle East and North Africa: Toward new development strategies*. Washington: The World Bank.

Baker, D.P. (2012). The educational transformation of work. A synthesis. In: H. Lauder, M. Young, H. Daniels, M. Balarin, J. Lowe (eds.), *Educating for the knowledge economy*? *Critical perspectives* (pp. 97–113). New York: Routledge – Taylor & Francis Group.

Corno, F., Reinmoeller, P., Nonaka, I. (2000). Knowledge creation within industrial systems. *Journal of Management and Governance*, *3* (4), 379–394.

Cunningham, S., Jaaniste, L. (2010). The policy journey toward education for the creative economy. In: D. Araya, M.A. Peters (eds.), *Education in the creative economy. Knowledge and learning in the age of innovation* (pp. 29–44). New York: Peter Lang Publishing.

David, P. (1997). The knowledge factor: A survey of universities. *The Economist*, *4* (October).

Feller, I. (1990). Universities as engines of R&D-based economic growth: They think they can. *Research Policy*, *4* (19), 335–348.

Florida, R., Knudsen, B., Stolarick, K. (2010). The university and the creative economy. In: D. Araya, M.A. Peters (eds.), *Education in the creative economy. Knowledge and learning in the age of innovation* (pp. 45–76). New York: Peter Lang Publishing.

Gürüz, K. (2011). *Higher education and international student mobility in the global knowledge economy*. New York: State University of New York Press.

Hearn, G., Bridgstock, R. (2010). Education for the creative economy: innovation, transdisciplinarity and networks. In: D. Araya, M.A. Peters (eds.), *Education in the creative economy. Knowledge and learning in the age of innovation* (pp. 93–115). New York: Peter Lang Publishing.

Kirk, D. (2010). The "knowledge society" in the Middle East. In: D. Obst, D. Kirk (eds.), *Innovation through education: Building the knowledge economy in the Middle East* (pp. 1–6). New York: The Institute of International Education.

Leśniewska G., Pluta A. (2011). Oczekiwania rynku pracy a zainteresowania i preferencje zawodowe młodzieży. In: Cz. Plewka, H. Bednarczyk (eds.), *Człowiek – Obywatel – Pracownik na rynku pracy* (pp. 107–120). Szczecin: WSH TWP.

Mitchell, W., Inouye, A., Blumenthal, M. (2003). *Beyond productivity: Information technology, innovation, and creativity*. Washington: The National Academies Press.

Neef, D., Siesfeld, A., Cefola, J. (2011). *The economic impact of knowledge*. New York: Routledge – Taylor & Francis Group.

Razali, N.M., Wah, Y.B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, *1* (2), 21–33.

Rooney, D. (2010). Creatively wise education in a knowledge economy. In: D. Araya, M.A. Peters (eds.), *Education in the creative economy. Knowledge and learning in the age of innovation* (pp. 179–199). New York: Peter Lang Publishing.

Turczak, A., Zwiech, P. (2015). Podobieństwo województw w Polsce pod względem rozkładu wydatków ich mieszkańców. *Ekonomia XXI Wieku*, *3* (7), 100–112.

Turczak, A., Zwiech, P. (2016). Porównanie województw w Polsce na podstawie rozkładu dochodu rozporządzalnego per capita. *Optimum. Studia Ekonomiczne*, *3* (81), 131–147.

United Nations (2008). *Creative economy. The challenge of assessing the creative economy: Towards informed policy-making*. Retrieved from: http://www.unctad.org (15.07.2017).

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THE ROLE OF RECOMMENDATIONS IN PROMOTING SERVICES OF POLISH UNIVERSITIES

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Abstract

Recommendations and "word-of-mouth" play an important role in service marketing. This specific form of communication involves supporting a product or service by a satisfied customer. "Word of mouth" is very helpful in building awareness of a brand, also in the higher education market. This paper provides some insight into a decision-making process of young people, who make the decision concerning the next step of their education, thus enabling the universities to develop the efficient communication program. Considering influence of recommendations on potential students, universities must learn how to use social ties to promote the educational offer.

The outcomes of survey conducted among Polish students will be also discussed, to evaluate, to what extend recommendations and word-of-mouth determined their choice of the particular university. Main goal of the paper is to discuss the usefulness of recommendations in the communication-mix of the universities. In that sense, it provides the contribution to service marketing practice.

Introduction

In common sense, the main factor influencing the choice of higher education is the quality of the services offered by an educational institution. According to Pabian (2005) the quality of educational services is defined as the level of satisfaction of needs and requirements of students, resulting from the educational and non-educational activities of the university. This quality is determined by university staff, physical environment of the university,

teaching processes and other factors, not related to the educational offer itself. Quality of university services may be measured and managed (Hall, 2007). However, it is difficult to assess, to what extent it influences the prospect students' choice of a faculty or a university course. It may be assumed, that potential students try to make rational and logical decisions regarding the perfect choice of their future by collecting, absorbing and storing data concerning the selected university. Despite the high level of involvement of candidates and their family in the decision-making process (Moogan, Baron, 2003) and many factors affecting potential students' "buying behavior" identified (Hobsons, 2013; Vrontis, Thrassou, Melanthiou, 2007), there is still a lot to learn about the real determinants of the ultimate selection. One of the important factors is the role of other people's influence over their decision.

Practical implications of such findings should help in planning the communication program of the university.

Literature review

Students enroll in university for various reasons. For example: to develop their future career, to improve their social status, to become independent from the parents, to delay their „grown-up life" and work. According to Hall (2007) potential students can be divided into several groups: quality-of-education-oriented, career-oriented, searchers-for-knowledge, scientific-title-oriented, comfort-oriented (those who search for simple enrollment procedures). For each of these specific segments, different selection criteria may play an important role.

Nowaczyk and Kolasinski (2007) indicated several elements determining the competitiveness of Polish universities, such as: scientific staff, number of students, teaching programs, tradition, position in university rankings, relations with foreign scientific and research centers etc. Some of them certainly may be treated as hints for candidates. Taking into account a personal situation of a student, sometimes social-support programs or easy and quick access to university premises may decide. However, not only the objective, measurable factors matter. The candidates' decision-making process is influenced by perceived attractiveness of university atmosphere, social network influences and individual motivations. One should not ignore the expected benefits, imaginations of "student-life" and sometimes unrealistic expectations regarding the post-graduate career. Such expectations may appear on a basis of stories told by colleagues, family members' recollections or other informal sources of information such as Facebook or YouTube. Recently, many research articles regarding the impact, that such social media have on the decision making process of future students, were published (Constatinides, Zinck Stagno, 2012; Hobson, 2013; Sankaran, Kannan, 2016). Many universities have adopted social media to recruit students and to communicate with graduates and current students. However, the effectiveness of social media in the context of attracting potential students and promoting educational services in the Polish higher education sector has not been sufficiently evaluated. Obviously, Polish teenagers and high school graduates use Facebook and other social media tools; therefore the information gathered through these communication channels may support the university choice. However, official fan-pages of faculties and universities are perceived by youth as dull and, somehow, "less reliable" than funny memos or messages shared by a friend. The role of social media in the phase of information search (Pabian, 2005) should not be overestimated. According to results of international students' research (Hobsons, 2013) direct email or phone conversation with a college officer was more than twice as important as social media.

On the contrary, opinions from people, who are current or former students of the university, are the most reliable sources of information and also important decision variables. In the research cited (Hobsons, 2013) more than 50% respondents indicated recommendations from university alumni as the criterion of their choice; recommendations from friends/family were mentioned by 38% of the students.

In addition, friends as the source of information were on the 4th position in the ranking, just after university webpage, electronic prospects and email communication with the recruitment office. According to Sweeney, Soutar and Mazzarol (2008), word-of-mouth recommendations and referrals are strong factors that can influence students' decision-making processes.

Since friends, trusted advisors, relatives, and family members may strongly affect the decision-making process of young people, the outcomes of the conducted research should give the answer to what extend recommendations and word-of-mouth determined their choice of the particular Polish university. On the basis of these results it will be worth considering, how the recommendations and referrals may be managed for the promotional purposes. Certainly the relationship marketing approach should be also implemented here.

Research method

The research was conducted to investigate the usefulness of buzz-marketing tools for promotion and recruitment processes in Polish universities and to study the impact of recommendations on the choice of educational institutions by potential students.

The survey was focused on Polish students from several Polish public universities located in Cracow, Katowice, Poznan, Rzeszow, Szczecin, Warsaw, Wroclaw and other cities.

The main goal of the referred survey was to identify the factors influencing the choice of the university by candidates. One of the specific objectives of the study was to evaluate the influence of recommendations on decision-making of prospect students.

The research objectives were aligned with the several secondary questions, among others:

– to determine, if potential students make use of recommendations for university selection,
– to determine, if recommendations influence the university selection process of potential students.

Research was conducted to collect data from young people currently studying in different public Polish universities. Primary data was collected in May–June from 242 respondents. The research method was CAWI (Computer-Aided Web Interview). A convenient sampling approach ('snow ball') was used to select respondents for this study; an invitation for the survey and a link to the online questionnaire was delivered to Polish students by emails and Facebook messages.

The literature review was used as the source of information to create the questionnaire, while a combination of closed- and open-ended questions was used.

Results

242 current students participated in the survey: 160 women and 82 men, aged 20 to 33. In majority the respondents were full-time students (81.8%). Only 30 respondents (12.4%) were studying at more than one faculty at the same time. In case a respondent was a student of more than one educational institution, one was asked to answer the questions with the regard to the university considered as foreground.

The respondents were asked to indicate, how many years they had studied at their current faculty. Figure 1 shows the 'year-of-study' structure of the sample. One-third of the group was 1st year students.

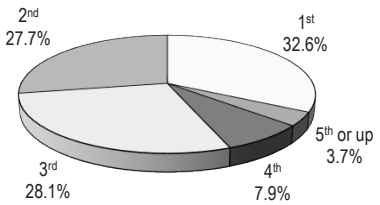

Figure 1. Structure of the sample concerning the current year of study at the university

Source: own study based on surveys.

In the sample dominated students from Cracow (33.9%), Katowice (18.6%), Rzeszow (11.6%) and Warsaw (9.5%). It must be noted that the study was limited to public universities only, but not restricted to specific university type.

To evaluate the impact of the immediate student's environment on the university choice, respondents were asked to recall how many classmates from their final class in high school had chosen the same college (see Figure 2). For almost 80% of the sample the decision regarding the selected university was taken jointly with other classmates. 15.7% students choose the same university as one of his/her acquaintances, 48.3% of the students made the same decision as 2–5 other classmates. These results show a very strong influence of teenagers' reference group over the decisions of potential students.

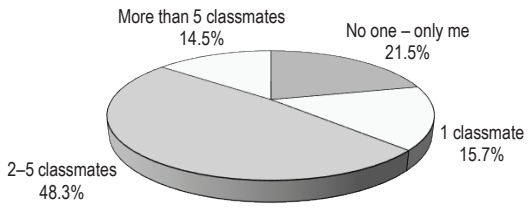

Figure 2. Number of classmates choosing the same university as the respondent

Source: own study based on surveys.

In addition the respondents were asked, how many close friends enrolled in the same faculty at the same university. Judging on the results (see Figure 3), the imitation effect plays an important role in decision-making of prospect students (Moogan, Baron, 2003).

More than half of the surveyed group of students (52.1%) has chosen the same faculty as (at least) one of his/her friends. Certainly the impact of friends' recommendations is an important factor in university selection process.

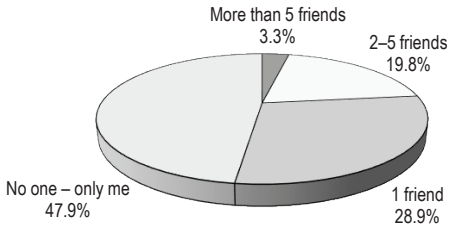

Figure 3. Number of respondent's friends attempting to enroll in the same faculty at the same university

Source: own study based on surveys.

These findings have been confirmed by outcomes of the next survey question, regarding sources of information used by potential students. Several answer options were drawn from the literature review (Moogan, Baron, 2003; Pabian, 2005; Hall, 2007) and included: educational fairs, university open days, online forums, social media, university rankings, promotional materials, university website, recommendations, etc. Figure 4 shows the predominance of direct sources of information accompanying by the official university webpage.

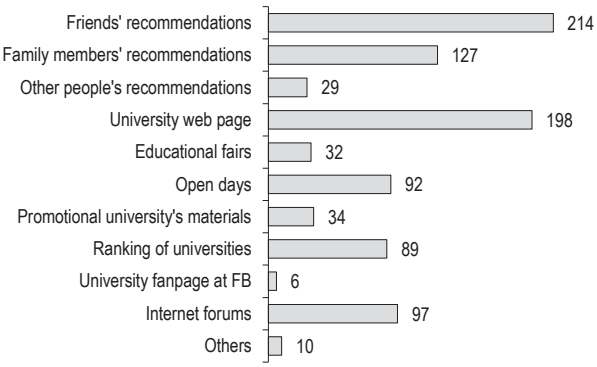

Figure 4. Sources of information used by respondents

Source: own study based on surveys.

Almost all candidates (88.4%) consulted their choice with friends, family members (52.5%) or strangers (12%). This means, that potential students treat the recommendations as the most reliable and hence, the best source of information. The vast majority (81.8%) sought information on the official website of the university. Surprisingly, the official Facebook fanpages reached rather low position in the ranking (only 2.5% indications), despite the fact, that teenagers are the most frequent social media users and according to other studies (Constatinides, Zinck Stagno, 2012; Sankaran, Kannan, 2016; Smedescu, Ivanov, Ioanas, Fruth, 2016) social media may be successfully used for promotion and recruitment purposes. It may be assumed, that the content of official university fanpages does not attract young people's attention.

Open days have been mentioned by several respondents (38%) along with the educational fairs (13.2%), because such events make possible the direct contact with the university and its representatives. Open days also enable interactions with current students, who are perceived as truthful and well-informed, when asked about the campus atmosphere and studying conditions.

It must be noted, that the universities' overall quality, as described by Pabian (2005) and Hall (2007) is reflected in rankings of universities and colleges, published annually by few Polish magazines. For candidates (and undoubtedly their parents) the university's position in such rankings is an important influencing factor (36.8% indications). Figure 5 gives insight into the main determinants of prospect students' decision-making.

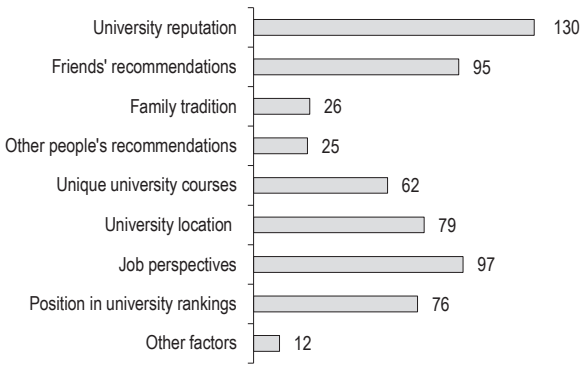

Figure 5. Determinants of the university choice perceived by respondents

Source: own study based on surveys.

More than 50% of the sample (130 respondents) paid attention to the reputation of the university. This means that students choose an institution, on which there is widespread belief that it is good and represents a high level of education. The reputation reflects also on the position of a university in published rankings. Perspectives of a well-paid job after graduation and friends' recommendations were consecutive determinants of candidates' choices.

In the conducted survey, respondents were also asked about the overall satisfaction on the studying in the current faculty. 57.9% of current students were satisfied with the choice they had made; 33.7% respondents were not sure, whether they are satisfied or not; as many as 8.7% of students have been studying, despite the fact that they regretted their choice and were not satisfied with the faculty and its offer. It is obvious, that if someone is dissatisfied with the chosen university, one will not encourage others. His/her prospect recommendation will be doubtful or misleading. It is evident, how important is implementation of relationship marketing approach in management of higher education services.

Limitations

Sampling method of this survey may affect the representativeness of data collected. Sampling frame of subsequent research should involve also part-time students and students from colleges and non-public educational institutions.

Conclusions

Conducted research shows a considerable impact of recommendations on decisions of prospect students in Poland, regarding their choice of a university. The results of the current study are convergent with outcomes of other research studies (Moogan, Baron, 2003; Vrontis et al., 2007; Constatinides, Zinck Stagno, 2012; Hobsons, 2013).

Respondents have great confidence in opinions expressed by family members and friends. Young people imitate behavior of their classmates or close friends, and attempt to enroll together at the same university or faculty.

Furthermore, it occurs that the candidate's decision is influenced by unknown people, who are considered as experts i.e. other students or alumni. Candidates search for information about selected studies using online forums, absorbing opinions supplied by complete strangers.

In the view of the conducted study, it can be stated, that Polish universities should appreciate the importance of creating strong relationships with current students and alumni. Relational approach in managing higher education services (in the context of maintaining relationships with professors, students, scientific and administrative staff) may bear fruits of positive opinions about the organization and encouraging recommendations towards candidates. Post-graduated students' associations and alumni reunion meetings may help in preserving university traditions and promoting its good reputation. Thus, promotion of university services may be significantly supported by good recommendations from satisfied students, postgraduates and the university staff.

Considering immense influence of recommendations on decision-making of potential students, universities must learn how to use social ties of young people, to promote the educational offer. Since advertising is depreciated by growing number of Polish teenagers, buzz marketing appears to be a real alternative to traditional forms of marketing communication (Hughes, 2005; Leila, Abderrazak, 2013).

In addition, implementation of new technologies, such as social media and social network viral marketing may support the university's promotion program and attracts attention of prospect students. Word-of-mouth and recommendations supplied by social media are widespread used as a source of information about the educational institution (Sweeney et al., 2008). Therefore Polish universities should be encouraged to fully utilize buzz marketing with the support of social media outlets such as Facebook, Twitter, LinkedIn or individual blogs. It must be stressed, that all social media tools, used to convey information about the university, students events, campus facilities etc. must be constantly updated and monitored to minimize negative comments. Yet, "word-of-mouth" and recommendations may be successfully used only if based on solid foundations: innovative and high quality educational offer, professional and kind university staff, encouraging post-graduation job perspectives, and well-designed websites.

References

Constatinides, E., Zinck Stagno, M. (2012). Higher Education Marketing: A Study on the Impact of Social Media on Study Selection and University Choice. *International Journal of Technology and Education Marketing*, *1* (2), 41–58.

Hall, H. (2007). *Marketing w szkolnictwie.* Warszawa: Wolters Kluwer Polska.

Hobsons (2013). *Competing Globally: Understanding the decision-making processes of prospective international students.* Retrieved from: https://www.hobsons.com/res/Whitepapers/24_Competing_Globally.pdf (20.09.2017).

Hughes, M. (2005). *Marketing szeptany. Buzzmarketing. Z ust do ust. Jak zrobić szum medialny wokół siebie, firmy, produktu.* Warszawa: MT Biznes.

Leila, C., Abderrazak, G. (2013). The Impact of the Effectiveness of a Buzz Marketing Campaign on the Image, Awareness and Purchasing Decision: The Moderating Role of Involvement. *Journal of Marketing Research & Case Studies*, 1–8.

Moogan, Y.J., Baron, S. (2003). An analysis of student characteristics within the student decision-making process. *Journal of Further and Higher Education*, *3* (27), 271–287.

Nowaczyk, G., Kolasiński, M. (2004). *Marketing szkół wyższych.* Poznań: Wydawnictwo Wyższej Szkoły Bankowej w Poznaniu.

Pabian, A. (2005). *Marketing szkoły wyższej.* Warszawa: Oficyna Wydawnicza ASPRA-JR.

Sankaran, V.S., Kannan, N. (2016). Effectiveness of Viral Marketing in Educational Institutions. *International Journal of Applied Engineering Research*, *2* (11), 1424–1431.

Smedescu, D.A., Ivanov, A.E., Ioanas, E., Fruth, A. (2016). Marketing Communications Mix in Higher Education Institutions. *International Journal of Academic Research in Economics and Management Sciences*, *4* (5), 291–298.

Sweeney, J.C., Soutar, G.N., Mazzarol, T. (2008). Factors influencing word of mouth effectiveness: receiver perspectives. *European Journal of Marketing*, *3/4* (42), 344–364.

Vrontis, D., Thrassou, A., Melanthiou, Y. (2007). A Contemporary Higher Education Student-Choice Model for Developed Countries. *Journal of Business Research*, *9* (60), 979–989.

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BRAND COMMUNITY AS A TOOL TO BUILD RELATIONSHIPS BETWEEN THE CONSUMER AND THE BRAND IN THE SERVICE MARKET – A THEORETICAL APPROACH

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Abstract

This article is about using BCs to manage brand equity in the service market. Theoretical considerations include the specificity of market services and the essence of BC formation. Various definitions of service are given. The service itself, however, is characterized by: immateriality, impermanence, inseparability of service and quality instability. The most popular model of service management by managers was shown. BC was presented from the modernism era through postmodernism up to the present. A set of variables influencing the emergence of the consumer group was shown. As a conclusion, the areas were shown in which a consumer group adhering to a given brand can be used to spread the brand image, increase loyalty, strengthen brand awareness, or better perceive its quality. BC is treated as a tool to manage the brand equity in the service market. The article recapitulation points to certain limitations. Its main imperfection is to present the problem only in theoretical terms, although the author sees the possibility of developing the problem based on research in the market of service goods.

Introduction

The everyday practice of marketing managers indicates a strong interest in the brand management process. The issue of the brand relationship with the consumer is often raised. Thus the importance of the "consumer-brand-engagement" concept (Hollebeek, Glynn, Brodie, 2014) is growing , i.e. consumer involvement in the everyday life of the brand.

It argues that the nature of the interaction between brands and consumers needs to be more closely scrutinized, i.a. by exploring engagement. The issue seems interesting to analyze especially when relating the brand management and building customer relationship with the brand to the service market.

Brodie (2011) defines "customer engagement" as "mental state, which is based on interactive co-creation of customer experience (Kacprzak, Dziewanowska, Skorek, 2015) with the object, e.g. brand." The reasons underlying this change include the observed growing scientific recognition for today's rather active than passive roles and behavior of consumers in specific brand-related processes. However, despite initial assumptions, data on the consumer engagement dynamics are still rare, mainly due to the lack of adequate measurement and empirical confirmation.

Getting customers' trust in the service goods market is a key issue for marketers in building customer relationships. In the service market, the efficiency of competitive prices is small because consumers may find price reduction as a sign of deterioration in service quality, which in turn can lead to a loss of market competitiveness for the service provider. That is why competition in the service market essentially takes the non-price form, whereby service providers improve their product and refine its original version by adding new elements that bring additional benefits to consumers (Mongiało, 2007). Thus a lot of attention is paid to the quality of services. (Stoma, 2012, Bielawa, 2010; Hamrol, Mantura, 2008; Parasuraman, Zeithaml, Berry, 1988). Consumer perception of quality is understood as "the features or properties expected by the customer, (...) the degree of product or service excellence associated with additional fulfillment of the expectations associated with the product or service, compliance with customer requirements" (Roszak, 2014).

Another topic in the area of enhancing the relationship between the brand and the customer in the service market is the idea of educating the customer in the service process and thus building a long-term relationship with him (Eisingerich, Bell, 2008). This education includes technical as well as organizational and functional knowledge.

Non-price brand management policy in services doesn't need to be limited to improving and refining the product by improving service quality or customer education in the service process. The purpose of this article is to present another tool to build the brand and customer relationships in the service market, which is a BC This article describes the essence of services, the mechanism of functioning of a BC and the benefits to customers and brand owners coming from a group of its fans.

The essence of services

Today, the growth of the service sector decides about the economic growth in most countries in the world. This is evidenced by the growing share of services in GDP, labour absorption, investment, consumption and international trade (Czubała, 2015). The marketing concept of services clearly indicates that a service is a specific product subject to exchange transactions. The American Marketing Association defines a service as "separate and non-material activity providing specific benefits that are not related to the sale of products or other services" (Styś, 2003). Grönroos (1990) emphasizes the service relational side, claiming that a service is "an action or a group of actions […], taking place during the interactions between the customer and the service provider representative or the customer and the service provider's physical environment." Likewise the service is defined by Kotler (2005), Gilmore (2006), Czuba (2001) and Payne (1997). According to the aforementioned definitions, the basic feature to distinguish services from the physical products is their immateriality. Other service features, i.e. synchronicity of the provision and consumption process, heterogeneity and instability are derived from their immateriality (Garbarski,

2001; Żurawik, 1999; Kotler, 2002; Czubała, Jonas, Smoleń, Wiktor, 2012). The specificity of services and especially their instability and immateriality require a different marketing approach than products. We should consider 3P, i.e. additional tools to be used in services, such as: people, physical evidence and process. The synchronicity of production and consumption generates a specific interaction between the service provider and the customer, which results in both the service provider and the consumer having an impact on the final form of the service.

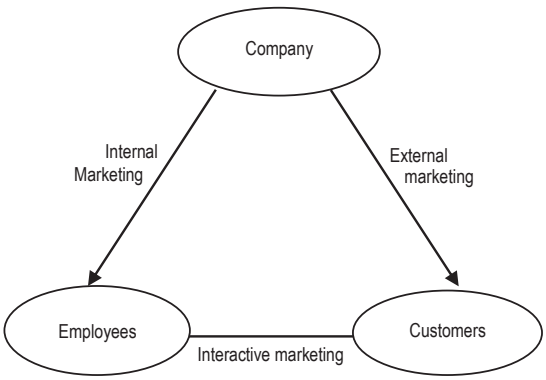

Figure 1. Service elements evaluated by the customer

Source: Kotler (2002), p. 714.

The consequence of the aforementioned relationship is understanding that building of the brand equity (Aaker, 1991) in the service market requires a different outlook on the classic tripartite division onto the external, internal, and interactive marketing. The last of the aforementioned areas allows us to manage the brand in services by considering the active role of the consumer or the whole consumer groups, which co-create or even co-manage the service brand.

Theoretical reflections on the concept of BC

From the beginning of this century up to now, BC. have been highly explored in marketing literature (Stokburger-Sauer, 2010). After the postmodern era and new forms of social relationships (Firat, Dhola, Venkatesh, 1995), a new need emerges for consumers characterized by the development of a sense of belonging to the group that places the formation of new social ties first among members of the grous. This is referred to as the “sense of community”. This concept summarizes the sense of belonging to the community and the awareness of it (Heller, Aliii, 1984; Newbrough, Chavis, 1986 cited by Abdelkader, Bouslama, 2014).

Thus, postmodernist groups are known for their sense of community, which are now one of the psychological constructs being the subject of large number of studies. The interest in communities in the modern sense may be the result of seeing opportunities to strengthen the loyalty of the community members by the brand owners (McAlexander, Schouten, Koenig, 2002, pp. 38–54), influencing the behaviour of members with the introduction of a new product under the brand (Thompson, Sinha, 2008), opposition to competitor brands (Muniz, O’Guinn, Schau et al., 2009), and affect the intention to purchase (Liaw, 2011).

BC. can also play an important role in creating relationships with the brand as their members are strongly associated with the brand and can become its advocates (Algesheimer, Dholakia, Herrmann, 2005; Andersen, 2005; Bagozzi, Dholakia, 2006,). As a result, BC. include people who may not be related to each other but only to a particular brand (Dubois, Westerhausen, 2011).

Muniz and O'Guinn (2001) list the following characteristics of brand communities:

– consciousness of kind,
– shared rituals and traditions),
– sense of moral responsilibity (see concepts' characteristics Skorek, 2017).

Use of the BC in the service market

The community characteristics described above, and the processes taking place in groups gathering around brands, have proven that emerging relationships in the community can be used to manage the brand in the service market.

To the previously described trio of relationships consisting of consumer and consumer and consumer and brand relations (Muniz, O'Guinn, 2001), another relationship was added (McAlexander et al., 2002). It was assumed that for the brand community member apart from relationships with other community members and with the brand itself, it is also important to have a relationship with the product he owns that's of a given brand, and with institutions which are owners of the brand he adores. The article authors also point out that the meaning of being a BC member comes not directly from the brand but from the experience acquired through engaging in a BC (McAlexander et al., 2002). Both types of community relationships centered around brands are illustrated below.

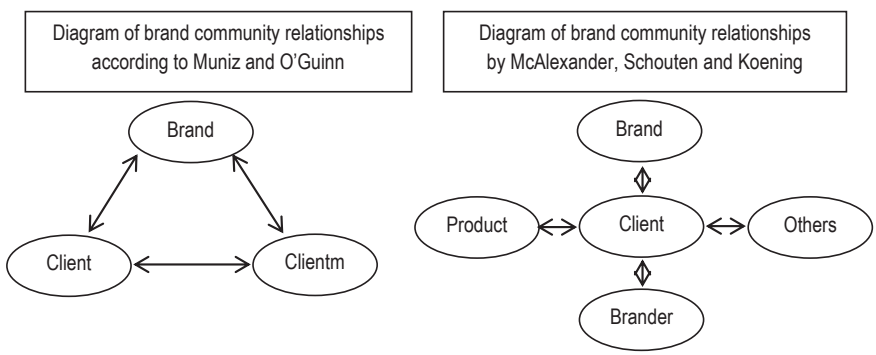

Figure 2. Relationships in the BC

Source: McAlexander et al. (2002), p. 39.

Although Muniz and O'Guinn have defined that BC is geographically unlimited, James H. McAlexander, John W. Schouten and Harold F. Koening state that the geographic concentration of a BC matters, if it's focused on one point, is scattered or exists only on the Internet (McAlexander et al., 2002).

The meanings of brand and branding have been evolving over the past several decades. This evolution is converging on a new conceptual logic, which views brand in terms of collaborative, value co-creation activities of

firms and all of their stakeholders and brand value in terms of the stakeholders' collectively perceived value-in-use. (…) Marketing managers might benefit from investing resources in building strong brand relationships with all of their stakeholders and a service-dominant firm philosophy built around brand value co-creation (Merz, He, Vargo, 2009).

Discussion

Managing a brand in the service market is an art due to the quoted characteristics of the service product. The product itself will become a brand when it is noticed and accepted by consumers. Therefore, the capital and value will be built on consistency and genuine cooperation with consumers. Thus, consumers' influence on the brand and its management is essential.

As described above, BC. present some unique features and opportunities for marketing activities, and in particular for the brand management in the service market. For managers, it is important to identify from the beginning the relationship between the brand and consumers from a given community. From a management point of view, it is important to understand why and how consumers engage in the BC and what are its consequences. For the BC members, their relationship with the brand can be seen as a relationship with a company or as a simple interaction with other consumers with similar interests. In both cases, the marketer must identify the best ways to interact with the community without generating a sense of initiation. Thus marketers will learn how to organize or maintain BC, as "building and managing brand environments seems cost-effective and efficient" (Algesheimer et al., 2005). BC can create value for their members as well as for brand owners. To strategically manage brands, we should consider the relevant variables engaging consumers in the BC Service companies can "leverage positive group effects happening in communities that lead to compliance, community engagement, brand knowledge dissemination, or affecting brand loyalty" (Algesheimer et al., 2005). Engaged consumers show greater loyalty, satisfaction, consolidation, connectivity, emotional bonding, trust and commitment "(Brodie, 2011) Most of these elements contribute to the formation of brand equity.

Experienced managers will confirm that brand equity can be built by creating appropriate structures of brand knowledge based on conversations with relevant consumers. These include brand community members. Consumers' engagement translates into brand awareness, so the presence in BC is based both on passion and brand awareness. BC becomes a vehicle through which consumers have the opportunity to share their opinions, thoughts, feelings and experiences, and to exchange brand information based on the subjective brand knowledge. Brands are built on the basis of consumer opinion and experience.

This is why the concept of co-management is proposed stating that "customers are active co-creators of brand value" (Cherif, Miled, 2013). Algesheimer, Dholakia, Herrmann (2005) believe that "BC offer a new, effective, and viral approach to brand building in the current marketing environment." In order to enhance the potential of these communities, it is recommended to identify opinion leaders and opinion-makers in each brand community. Influential community members can significantly influence the views of other community members.

McAlexander, Koenig, Schouten (2006) conducted a study on the market of higher education services. It showed that this area can also evoke and benefit from the valued qualities of brand community, that are associated with these brands and products. This study shows, that integration in a brand community in higher education can contribute to such valued behaviors as donations, college referrals, engagement in alumni groups, and participation in continuing education. These are the outcomes, that are sought by those professionals, who share the responsibilities of marketing and advancement in higher education (McAlexander et al., 2006).

The most important conclusion of this study is the demonstration of strategic value for educational service managers (McAlexander et al., 2006):

- utilizing the synergy effect resulting from managing of a group rather than of individual clients gives better possibilities for brand management and stronger commitment to the brand,
- the use of knowledge and cooperation of university staff with students gives the opportunity to strengthen relationship with the brand,
- reaping the benefits resulting from cooperation with alumni associations to maintain relationship with the brand,
- making the managers aware that they should start building relationships with students right from the first contact in classes and not after the students graduate.

Conclusions and limitations

This study is of a theoretical nature. It considered the specificity of the service market and presented the overview of issues related to the BC It also showed the concept essence, its characteristics, community features and factors contributing to the formation and organization of the BC In the article two areas were linked to show how to use BC to build customer relationships with the brand in the service market. The only limitation of the text is adopting only a theoretical perspective. In the future the presented theoretical considerations should be applied in specific market situations and a study should be conducted based on specific brands in the service market. Perhaps we should think of building a model to analyze the mechanism of maintaining the existing BC. It is expected that the increasing level of consumer engagement with the brand will promote better performance, including increased sales, lower costs, increased brand recommendations, enhanced consumer input into the common product development process, enhanced co-creation and improved profitability. Consequently, engagement will become a key censor to evaluate the brand performance in the service market.

References

Aaker, D.A. (1991). *Managing Brand Equity.* New York: The Free Press.

Abdelkader, S., Bouslama, N. (2014). The Role of Sense of Community in Mediation between Positive Emotions and Attitudes toward Brand and Message. *Journal of Marketing Research & Case Studies*, *17.* DOI: 10.5171/2014.349677.

Algesheimer, R., Dholakia, U.M., Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, *3* (69), 19–34.

Andersen, S.H. (2005). Relationship marketing and brand involvement of professionals through web-enhance brand communities: The case of Coloplast. *Industrial Marketing Management, 1* (34), 39–51.

Bagozzi, R.S., Dholakia, U.M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, *1* (23), 45–61.

Bielawa, A. (2010). Miejsce jakości w usługach. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Przedsiębiorstwa w procesie zmian. Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania*, *17*, 255–263.

Brodie, R.J., Ilic, A., Juric, B., Hollebeek, L. (2011). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *1* (66), 105–114, DOI:10.1016/j.jbusres.2011.07.029.

Cherif, H., Miled, B. (2013). Are Brand Communities Influencing Brands through Co-creation? A Cross-National Example of the Brand AXE: In France and in Tunisia. *International Business Research*, *6* (9), 14–29.

Czuba, M. (2001). *Marketing usług. Teoria i praktyka.* Katowice: Wydawnictwo TARA.

Czubała, A. (2015). Innowacje w sektorze usług w Polsce. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, *1* (26), 35–45.

Czubała, A., Jonas T., Smoleń J., Wiktor W. (2012). *Marketing usług.* Warszawa: Wydawnictwo Wolters Kluwer Polska.

Dubois, T., Westerhausen, U. (2011). *Brand loyalty creation within online brand communities.* Copenhagen: Copenhagen Business School.

Eisingerich, A.B., Bell, S.J. (2008). Perceived Service Quality and Customer Trust. Does Enhancing Customers' Service Knowledge Matter? *Journal of Service Research*, *3* (10), 256–268.

Firat, A.F., Dholakia, N., Venkatesh, A. (1995). Marketing in a postmodern world. *European Journal of Marketing*, *1* (29), 40–56.

Garbarski, L. (2001). *Marketing.* Warszawa: PWE.

Gilmore, A. (2006). *Usługi. Marketing i zarządzanie.* Warszawa: PWE.

Grönroos, C. (1990). *Service management and marketing, Managing the moments of thruth in servicecompetition.* Massachusetts: Lexington Books.

Hamrol, A., Mantura, W. (2008). *Zarządzanie jakością. Teoria i praktyka.* Warszawa: Wydawnictwo Naukowe PWN.

Hollebeek, L.D., Glynn, M.S., Brodie, R.J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, *28*.

Kacprzak, A., Dziewanowska, K., Skorek, M. (2015). *Gospodarka doświadczeń. Perspektywa polskiego konsumenta.* Warszawa: Wydawnictwo Naukowe PWN.

Kotler, P. (2002). *Marketing podręcznik europejski.* Warszawa: PWE.

Kotler P. (2005). *Marketing.* Poznań: Dom Wydawniczy REBIS.

Liaw, G.F. (2011). A Study on the Influence of Consumers' Participation in a Brand Community on Purchase Intention. *Journal of International Management Studies*, *1* (6). Retrieved from: http://www.jimsjournal.org/pi.html.

McAlexander, J.H., Koenig H.F., Schouten J.W. (2006). Building Relationships of Brand Community in Higher Education: A Strategic Framework for University Advancement. *International Journal of Educational Advancement*, *2* (6), 107–118.

McAlexander, J., Schouten, J., Koenig, H. (2002). Building Brand Community. *Journal of Marketing*, *66*, 38–54.

Merz, M.A., He, Y., Vargo, S.L. (2009). The evolving brand logic: a service-dominant logic perspective. *Journal of the Academy of Marketing Science*, *37*, 328–344.

Mongiało, D. (2007). Czynniki wpływające na strukturę rynku usług. *Gospodarka Narodowa*, *3*, 85–98.

Muniz, A., O'Guinn, T. (2001). Brand Community. *Journal of Consumer Research*, *4* (27), 12–432.

Parasuraman, A., Valarie, A., Zeithaml, L., Berry, L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality. *Journal of Retailing*, *1* (64), 12–40.

Payne, A. (1997). *Marketing usług.* Warszawa: PWE.

Roszak, M. (2014). Zarządzanie jakością w praktyce inżynierskiej. *Open Access Library*, *1* (31), 103–145.

Schau, H.J., Muniz Jr., A.M., Arnould, E.J. (2009). How Brand Community Practices Create Value. *Journal of Marketing*, *5* (73), 30–51.

Skorek, M., (2017). Natura wspólnoty wokół marki w świetle badań własnych. *Marketing i Rynek*, *7*.

Stokburger-Sauer, N. (2010). Brand Community: Drivers and Outcomes. *Psychology & Marketing*, *4* (27), 347–368. DOI: 10.1002/mar.20335.

Stoma, M. (2012). *Modele i metody pomiaru jakości usług.* Lublin: Lubelski Dom Medialny.

Styś, A. (2003). *Marketing usług.* Warszawa: PWE.

Thompson, S.A., Sinha, R.K. (2008). Brand Communities and New Product Adoption: The Influence and Limits of Oppositional Loyalty. *Journal of Marketing*, *6* (72), 65–80.

Żurawik, B. (1999). *Marketing usług finansowych.* Warszawa: Wydawnictwo Naukowe PWN.

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SERVICES OF RETURNS MANAGEMENT AT LOGISTIC CENTRES

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Abstract

Returns of products occur in almost every kind of economic active companies. Important challenge is to use the proper management practices for returns handling. The companies that are aware of such functionality might expect the bigger market success than others. Proper returns management means not only actions taken by the companies themselves, but also activities that can be fulfill by other logistic parties, supporting and supplementing them, so here for example logistic centers.

The main purpose of this paper is to present the role of logistic centers and logistic services provided by them for supporting and supplementing activities connected with returns management in Polish reality.

The paper presents at first the services at logistic centers and the concept of returns management. Next there is a brief description of research methodology in the form of survey conducted in Polish enterprises. After, research results are pointed out together with illustrative idea of usage the services of logistic centers for more efficient and effective returns management. Finally, there is a short conclusion with the discussion and suggestions for future research.

Introduction

Recently, because of developing economy and growing customer`s needs and awareness, a lot of companies faced of the problems concerning increasing level of products that are returned. The enterprises must deal with product returns to keep the balance of their economic activity. In this case the concept of returns management is very useful. It is dealing with flows of returns such as product recalls, warranty returns, service returns, end-of-use

returns, etc. But it is not necessary that returns management have to be organized by the company. Focusing on competition, market, economic and environmental aspects, it is possible that the function of providing the services of returns management would be the scope of logistic centers.

These logistic entities are undoubtedly one of the most important elements in the logistic chain. Thanks to them is guaranteed to organize flow of goods or returns with a simultaneous reduction of logistic costs. Also important are: storage in the most appropriate conditions for a specific products/returns, professional separation, packing and loading of products/returns, the possibility of fast delivery, shorten transport routes and optimum utilization of the trips, which not only reduces traffic, but also environmental impact. The main goal of logistic centers are: the availability of certain material goods in the necessary quantity at the desired place at the right time and at the lowest possible cost (Starostka-Patyk, Skowron-Grabowska, 2016). At this base it is possible to identify the functions of logistic centers services for returns management.

The concept of returns management

In each chain of delivery, its reverse direction may be generated. Even though it seems to be a complex task, it may be achieved providing that the management process operates properly. The return of product is usually perceived negatively by a customer what can later result in adverse relations with the given brand.

In reverse logistics, the returns management has a wider scope of application than just returning the product (Stock, Speh, Shear, 2006). Its scope covers elements such as marketing, financial operations and accounting. Integration of all of these areas creates a new branch of logistics, which may result in creation of whole chains covering the management of any kinds of returns. This is a new phenomenon, whose features have just been emerging. The opportunity for research is provided, which will define this phenomenon, its influence on managing processes and logistic approach. The development of this branch is also influenced by global eco-politics, which is conducive to gaining or rather recovering value from goods that have fulfilled their basic task and finished their cycle. All of current tasks, which aim to obtain as much information as possible about this phenomenon, will contribute in the near future to the emergence of a new management theory, namely, the returns management process.

Returns management requires very good knowledge of products' production processes, and assessment whether a given product has the processing capacity at all and whether it will be profitable. In order to manage returns rationally, it was established that customers presenting some kind of financial value should also be implemented in the management process. The returns management process is influenced by various directives which pose as its primary pillar. The actions of entrepreneurs must comply with law, which more often and wider defines the framework of these actions by applying numerous restrictions resulting from pro-ecological policy. Entrepreneurs must therefore constantly follow all amendments and use functional and flexible solutions in order to adapt to changing conditions (Mollenkopf, Russo, Frankel, 2011).

In Europe, the concept of returns management has started to be more and more popular. In recent years, the awareness of Europeans towards ecological activities has increased significantly which gives the basis to the creation of new trends in returns management. (Szymczyk, 2016)

Logistic center as services provider

Logistic center is a facility that provides a wide range of logistic services. These facilities are spatial objects with certain features situated in key areas which allow their functioning. Main tasks of these centers are related to

the receipt, storage, distribution and delivery of products, as well as range of other services provided by entities independent of the sender or receiver of those products (Rydzkowski, 2007).

Logistic centers are considered to be a very efficient form of transforming the areas with a bad economic situation because their creation not only gives a start to new investments related to the arrival of new entities, but they also contribute to the stimulation to activity of the local economy (Kucharczyk, 2014).

The modern market of logistic services is relatively well developed (Brzozowska, Starostka-Patyk, 2006) and the logistic centers, which cover a wide range of activities, bring consistently added value (Skowron-Grabowska, 2010), as shown in Figure 1.

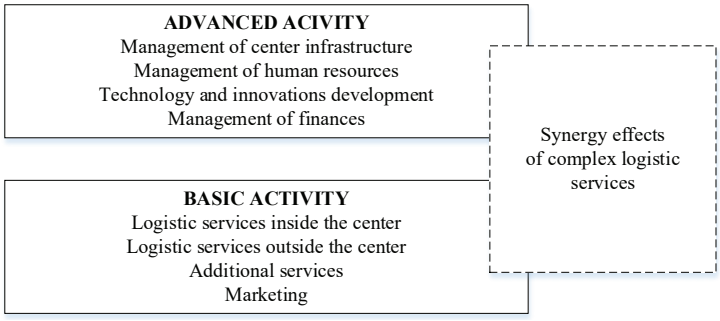

Figure 1. Activities of logistic center

Source: Lisiński (2004).

The primary functions of each of logistic centres can be divided into three main groups: basic, compelentary, supporting and market oriented. The details of these functions are presented in Table 1.

Table 1. Functions of logistic center

Basic functions	Complementary functions	Supporting and market oriented functions
– shipping – transport – storage – inventory management – order management – supply management – distribution management – packing – completion	– intermodal transshipment loading units – customs service – insurance – management of collective transport packaging trade – rental of containers, pallets and other transport packaging – IT and telecommunications services – promotion and marketing	– vehicles technical service – sale of fuels, oils and accessories – container and other transport packaging repairs – waste disposal – supply of energy utilities – hotel services – catering services – banking services – accounting services – telecommunication services – cleaning services

Source: Kisperska-Moroń, Krzyżaniak (2009).

Because of logistic centers multitask, they are able to pursue a wide range of operations and offer a broad scope of services to their customers. They provide therefore a universal and exceptionally helpful solution to product

management including the return of products. These centers have already been operating in a number of European countries and vary in the degree of advancement towards return management tasks.

In Poland, this kind of services is considered to be a big support for entrepreneurs, for which there is constantly growing demand in a market. While, existing logistic centers offer a wide range of services, they are not targeted at returns management processes what means that they also do not support the process of return. They primarily offer the basic services, whose characteristics and development over the last few years are shown in Table 2.

Table 2. Services offered by Polish logistic centers (%)

Services	2008	2009	2010	2011
Transport	100	100	100	100
Storage	26	47	100	100
Inventory management	26	47	100	100
Planning and analyzing of logistics	6	13	33	60
Packing	20	40	60	80
Customs	20	13	26	27
IT systems	6	6	26	27
Car park and car maintenance	6	13	20	20
Hotels	–	–	20	20

Source: Kott, Grondys (2013).

The above presentation shows that although the scope of services in logistics has been increasing and for some services even quite considerably, the services related to return process still show very low presence in the market. New entrepreneur who want to succeed in the process of creating new logistic centres enter the potentially niche market, which may result in increase of the demand for this type of service, providing that appropriate steps of cooperation are taken with key industry entrepreneur.

The mutual market relations and tasks which result from them, create the opportunity for development of the services concerning the returns management.

Research methodology

The research was made in the first quarter of 2014 year in the form of questionnaire (Starostka-Patyk, 2016). This questionnaire had 20 questions and was divided into 3 sections: main section, information about responding company and confidential part. The research was quantitative, and was conducted through telephone interviews (CATI) by a hired an outside company that specializes in this type of research. The main goals of the study was to receive the information related to the returns and the manner of their management in the studied companies.

The survey was addressed to Polish manufacturing companies in sectors with high potential for the creation of returns, so mainly automotive, household appliances, electronic and computer equipment, toys and clothing, etc.

Respondents were representatives of companies holding managerial positions at the level of the entire company and those who were chosen by them – identified as responsible for taking back returns and develop strategies and policies of the company in this field.

The sample covered 302 manufacturing companies located on Polish territory. It has been determined based on statistical calculations and is a representative sample (Zawada, 2004), so that the results of the study reflect the situation of all Polish production companies.

Research results

For the purpose of this paper only part of the research results was taken into account. In this regard, the question was about self-reliance of identified activities connected to returns management realization. The surveyed companies could point out if these activities are taken by themselves, are outsourced or are not realized at all. The results given by respondents are presented in Table 3.

Table 3. Activities of returns management in Polish enterprises (%)

Returns activities	Self-reliance	Outsourcing	Not realized
Take-back	64	3	33
Donation to the charity	17	1	82
Re-packaging and sell as new	20	2	79
Re-sell	19	1	80
Renovation (repair, cleaning, etc.)	45	6	49
Usage for production as components or secondary raw materials	23	7	70
Sell-out	28	0	73
Disassembly to elements for re-use	18	6	76
Recycling	33	16	52

Source: Starostka-Patyk (2016).

It is possible to observe that in Polish production enterprises most activities regarding returns management is not realized at all. 64% of companies is taking back their products themselves, and 45% is realizing the renovation processes. The rest of activities is realized self-reliance with the low percentage indicators, or is not realized at all with higher percentage indicators.

Such situation is not recommended for Polish business. The enterprises use logistic services providers too rarely, while the European level of such services is on much higher position (Nowakowska-Grunt, 2011).

With the example of other European countries is should be noted that logistic centers have large impact on returns management practices and by supporting enterprises with returns management services create added-value for them (Tundys, 2011). Such supportive role of logistic center is presented at Figure 2 highlights how big role might play the logistic center in returns management.

By the point of logistic center all other entities involved in returns management are connected. It means that with the support of logistic centers services all other participants dealing with returns flows can redirect these flows to this one point, and thanks to it, they do not have to manage the whole way of these flows through all participants. With such solution, all participating enterprises can focus on their primary economic activity, with usage of outsourcing for managing the returned products. It is a huge advantage, because returns management is difficult in many points at operational, tactical and strategic levels, and that is why many companies do not mange returns properly or they do not manage them at all (Grondys, Bajdor, 2016; Dziadkiewicz, 2007).

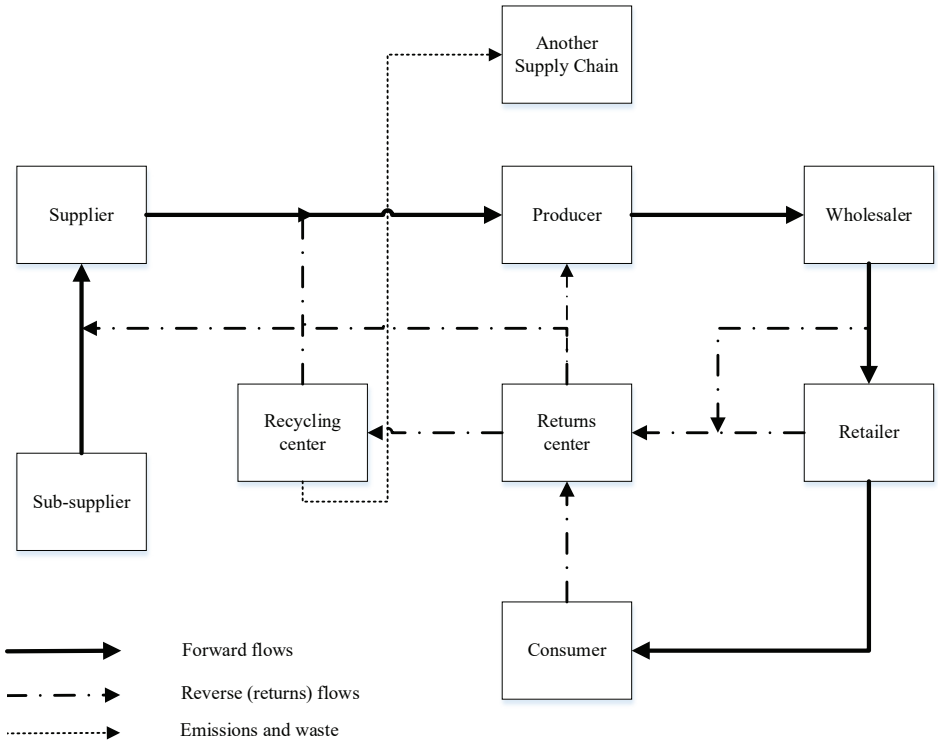

Figure 2. Support activity of logistic center in return flows management in enterprises

Source: Nitkiewicz (2015).

Also, what is important in the case of returns management, logistic centers are very useful for information flow support. When the logistic center is already managing the returns flows, it is also obligated to manage the information connected to them. This is the crucial activity, because with lack of information the returns management is not possible to exist. And this is important, especially because managing information is case of returns management is much more difficult than in case of regular products in traditional logistic flows.

The flows of information in case of returns management by logistic center is presented at Figure 3.

Figure 3 shows that the flows of information about returns are multidirectional and include all participants. This highlight the reason for usage the logistic center for support activities of returns management in enterprises. Thanks to this solution all involved entities are able to receive full package of necessary information that allow them to plan the future actions regarding returns management.

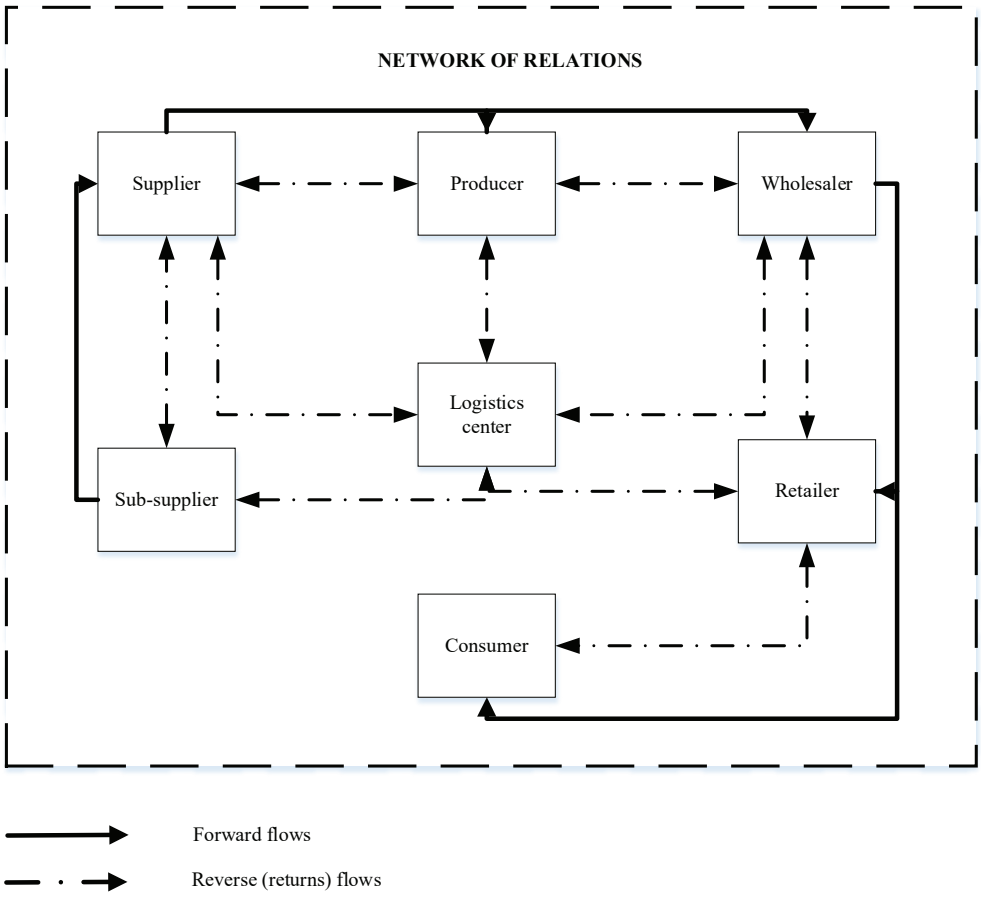

Figure 3. Information exchange about return flows between logistic center and other involved entities

Source: Nitkiewicz (2015).

Conclusions

Poland is one of the European countries that still develops its market, also the logistic one. Even if logistic centers exist here already for several years, they still need to be developed with some new services. While the consumer market seems to be very demanding and by this the returns management becomes more and more important in the companies` strategy, logistic centers development can cover this area with their supporting and supplementary services.

This paper presents the services of logistic centers in Poland as the answer for increasing need of logistic services for returns management. The research made shows that enterprises do not realize themselves most of activities in area of returns management. This proves the lack of solutions. The good practice would be to widen the services of logistic centers with services supporting and supplementing the companies with returns management. The useful way would be to implement the cooperation between companies and logistic centers on

returns management practices, because than the enterprises could focus on their primary activity. Such cooperative solution gives benefits for all participants, also with creation of added-value. It is worth to focus the future research deeper at this problem to receive some concrete solutions in the case.

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References

Brzozowska, A., Starostka-Patyk, M. (2006). Kierunki rozwoju centrów logistycznych w Europie. *Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN z. 225*. T. Markowski (ed.), *Rola centrów logistycznych w rozwoju gospodarczym i przestrzennym kraju*. Warszawa.

Dziadkiewicz, M. (2007). Outsourcing w procesie zarządzania strategicznego przedsiębiorstwem. In: F. Bylok, R. Janik (eds.), *Ekonomiczne i społeczne uwarunkowania zarządzania międzynarodowego* (pp. 55–63). Częstochowa: Wydawnictwo Politechniki Częstochowskiej.

Grondys, K., Bajdor, P. (2016). Determinants of Applying the Outsourcing in the Area of Maintenance of Manufacturing Enterprises. 5th IEEE International Conference on Advanced Logistics and Transport (IEEE ICALT'2016). Kraków, 1–3.06.2016.

Kisperska-Moroń, D., Krzyżaniak, S. (2009). *Logistyka*. Poznań: Wydawnictwo Instytut Logistyki i Magazynowania,.

Kott, I., Grondys, K. (2013). Problemy działalności centrów logistycznych w aspekcie zarządzania przedsiębiorstwem. A. Korombel (ed.), *Współczesne problemy zarządzania przedsiębiorstwami. Teoria i praktyka.* Częstochowa: WWZPCz.

Kucharczyk, R. (2014). Centra logistyczne – istota, zadania, funkcje. *Logistyka*, *3*, 3490–3495.

Lisiński, M. (2004) . *Metody planowania strategicznego*. Warszawa: PWE.

Mollenkopf, D., Russo, I., Frankel, R. (2011). Creating value through returns management: Exploring the marketing – operations interface. *Journal of Operations Management*, *29*, 391–403.

Nitkiewicz, T. (2015). Contribution of Returned Products Handling Scenarios to Life Cycle Environmental Impacts. 8th International Conference on Environmental Engineering and Management (ICEEM08). Iasi, Rumunia: Ecozone Publishing House.

Nowakowska-Grunt, J. (2011). Strategie przedsiębiorstw na rynku usług logistycznych w Polsce i Europie. *LogMare*. III Konferencja Naukowa Logistyka Morska. 26–28 października. Jastarnia.

Rydzkowski, W. (2007). *Usługi logistyczne*. Poznań: Biblioteka logistyka.

Skowron-Grabowska, B. (2010). *Centra logistyczne w łańcuchach dostaw*. Warszawa: PWE.

Starostka-Patyk, M. (2016). *Logistyka zwrotna produktów niepełnowartościowych w zarządzaniu przedsiębiorstwami produkcyjnymi.* Warszawa: PWE.

Starostka-Patyk, M., Skowron-Grabowska, B. (2016). The Need of Returns Logistics Centres Creation at the Polish Services Market – Theoretical Approach Based on Logistics Management of Defective Products Concept. 5th IEEE International Conference on Advanced Logistics and Transport (IEEE ICALT'2016). Kraków, 1–3.06.2016.

Stock, J., Speh, T., Shear, H. (2006). Managing Product Returns for Competitive Advantage. Retrieved from: http://sloanreview.mit.edu/article/managing-product-returns-for-competitive-advantage (19.07.2017).

Szymczyk, K. (2016). Green Solutions in Global Supply Chain. *Supply Chain Management Journal*, *1* (7), 61–69.

Tundys, B. (2011). Istota i definicja logistycznej wartości dodanej łańcucha dostaw. *Zeszyty Naukowe Uniwersytetu Gdańskiego. Ekonomika Transportu Lądowego*, *40*, 99–109.

Zawada, M. (2004). Zastosowanie metody reprezentacyjnej przy doborze jednostek do monitorowania poboru energii elektrycznej. In: A.W. Mitas (ed.), *Statystyka i informatyka w nauce o zarządzaniu* (pp. 125–133). Sosnowiec: Wyd.W.Szk.Zarz.i Mark.

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SPA SERVICES DISTRIBUTION AND SPA SPECIALIZATION IN EASTERN POLAND SPA COMMUNES

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Keywords spa specialization, tourism specialization, spa, distribution, spa resort

Abstract

The aim of the paper is to identify and explain the relation between spa services distribution and spa specialization of Lubelskie (Nałęczów), Podlaskie (Augustów), Świętokrzyskie (Busko-Zdrój and Solec-Zdrój) and Warmińsko-Mazurskie (Gołdap) spa communes. Time series analysis techniques, Spearman rank correlation analysis and linear regression analysis were used. Spa services distribution was measured by the share of non-commercial spa inpatient number in total spa inpatient number, whereas spa specialization was measured by the share of nights spent in spa establishments in total nights spent. Statistical data came from the Central Statistical Office of Poland Local Data Bank and the unpublished data collection obtained from the Statistical Office in Kraków. In the case of Nałęczów analysed relationship is functional, where a rise in number of nights spent in connection with the growth of spa specialization and the increase in spa service distribution – a risky combination of trends, due to increasing dependence on the state distribution channel.

Introduction

The chosen research problem is the verification of the relationship between the spa services distribution (SSD) and spa specialization of the Lubelskie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie communes. The aim is to identify and explain this relation. The following question was asked: if, and if so – to what extent, analysed relation is a correlation or functional relationship? The research hypothesis is placed: the strength of the relation

in question is varied, with two groups of communes separated: partly with stronger and statistically significant correlation and functional relationships and partly with weaker and statistically insignificant. The research subject are the spa communes, i.e. which possess in their territory areas with the status of a health resort.

The spa communes of the Lubeskie (Nałęczów), Podlaskie (Augustów), Świętokrzyskie (Busko-Zdrój, Solec-Zdrój) and Warmińsko-Mazurskie (Gołdap) voivodeships concentrated in the years 1995–2014 7% of the tourist traffic in the spa communes in Poland (excluding Kraków), measured by the nights spent number (Central Statistical Office of Poland Local Data Bank – CSOP LDB).

Among the mentioned spa communes particular important is Busko, which is the 9th place in Poland among the spa destinations (excluding Kraków) according to nights spent (0.5 million) in 2014, and also in 6th place in Poland in terms of nights spent in spa establishments (0.4 million) (CSOP LDB).

In spa towns, as tourism destinations, spa services are distributed through two complementary channels: market (commercial) and state (social). They were described in another study (Stelmach, 2017c).

In the light of wider characteristics of spa and tourism specialization (Stelmach, 2017c) and the operationalization of the spa specialization (Stelmach, 2017a), the spa specialization is understood as a part of the spa economy within the tourism economy, whereas tourism specialization is a part of tourism economy in the economy.

The rest of the paper is organized as follows: a literature review introduces the current status of reseach, a method and data sources section provides the particular research aims, research techniques and data origins used for analyzing the research issue; the results section presents research findings; while the last section concludes the paper and suggests further directions and policy implications.

Literature review

The presented study is the next in a series of already published author's works on the relationship between spa service distribution and spa specialization. So far (Stelmach, 2017acde), the relationship between SSD and spa specialization has been analyzed for 17 spa communes in Podkarpackie, Kujawsko-Pomorskie, Pomorskie, Małopolskie and Śląskie voivodeships, which combined in 1995–2014 48% tourist traffic measured in terms of number of nights spent (CSOP LDB). Other studies didn't compare the phenomena of SSD and spa specialization, usually analyzing these issues separately.

Research on the SSD has focused on the duality and diversification of distribution channels and its consequences for spa companies and communes (Romanova et al., 2015; Derco, Pavlisinova, 2016; Dryglas, Różycki, 2016, 2017; Dryglas, Salamaga, 2017; Kozarkiewicz, Kabalska, 2017; Stelmach, 2017ab; Szromek et al., 2016; Vrkljan, Hendija, 2016). Existing research in these two areas has produced the following conclusions (Stelmach, 2017a):

1. The current excessive dependence of spas in some countries on the spa services state distribution channel is risky, as sudden legal or financial regulatory shocks can pose an economic threat to spa companies and communes. Moreover, non-commercial spa patients bring less income to both spa companies and communes.
2. Commercial spa patients are key customers because they provide greater value for spa companies and destinations in the form of higher spending and more valuable feedback. For some spa communes, foreign spa patients are the key guests. The ability to attract a commercial spa patient is a strategic challenge for spa communes.

It has been established (Stelmach, 2017a) that a total of 34 Polish spa communes treated jointly,[1] representing 79% of spa communes in Poland,[2] have a strong (Spearman correlation coefficient of –0.9), a statistically significant negative correlation. This result can be interpreted as a strong positive relationship between SSD and non-spa specialization or between state SSD and spa specialization.

In addition, it has been identified (Stelmach, 2017e) that the strength of the relation in question is varied, with two groups of communes separated: mostly with stronger and statistically significant relationships and rarely with weaker and statistically insignificant. Within the group of communes for which the relationships are statistically significant, SSD is usually negatively correlated to spa specialization.

Four different development patterns of spa communes were identified and evaluated, among which mostly the rise of nights spent is connected with the growth of spa specialization and the decrease of SSD, which is a risky combination of trends due to growing dependence on state distribution channel. Identified different development patterns may have an impact on the balance of benefits and costs of service for spa patients and tourists by spa companies and destinations.

Method

Table 1 shows the research procedure and the ordered set of research techniques and sources comprising the method.

Tabela 1. Research method

Purpose of research	Data sources	Research techniques
Identification of time series for SSD	Secondary data concerning 5 Polish spa communes from 2005 to 2015, originating from an unpublished data set from CSOP from the Statistical Office in Kraków	Time series analysis
Identification of a time series for spa specialization	Secondary data concerning 5 Polish spa communes from 2005–2014 from the CSOP	
Estimation of the correlation and dependence between SSD and spa specialization	Secondary data concerning 5 spa communes from 2005–2014 from the CSOP unpublished data and LDB	1. Analysis of Spearman rank correlation. 2. Student's t test for statistical significance of correlation coefficients. 3. Regression analysis

Source: author.

Quantitative techniques were used to accomplish the goal and answer question. Time series analysis serves to improve understanding of the variability of correlations and to identify their properties such as trends and periodicity. Spearman correlation analysis with a student t-test is used to identify statistically significant relationships between variables with asymmetric distribution and the small number of available observations. Simple regression analysis models the relationships between dependent variable (spa specialization) and independent variable (SSD).

The spatial extent of the research included two spa communes of Świętokrzyskie voivodeship (Busko, Solec) and one of the Lubelskie (Nałęczów), Podlaskie (Augustów) and Warmińsko-Mazurskie (Gołdap), identified as

[1] These spa communes are listed in another study (Stelmach, 2017c).

[2] For 9 communes the data deficiencies have not allowed for the estimation of correlation coefficients. They are enumerated in another study (Stelmach, 2017c).

having available data for correlation and regression analysis for 2005–2014. The use of secondary data was justified in another study (Stelmach, 2017c).

The relatively small number of observations (N = 10, 2005–2014) was because of the length of time the CSOP has collected statistics on the commercial spa inpatients (data available from 2005) and the coming into force of an amendment to the Public Statistics Act of 2015, which resulted in the CSOP ceasing access to data on the nights spent at commune level from 2015.

In order to measure the theoretical constructs used in the study, the concepts of the SSD and the spa specialization were operationalized. Differently from Stelmach's (2017a) work, the SSD of was measured by:

SSD indicator = non-commercial spa inpatent number/total spa inpatient number,

where inpatient means patient using treatment on a 24-hour or on a daytime basis, i.e. in a sanatorium or spa resort hospital.

For reasons given in P. Stelmach (2017a) spa specialization was measured using:

Spa specialization indicator = nights spent in spa establishments/total nights spent in tourist accomodation establishments, where a spa establishment is a health care provider located in the spa commune and uses natural healing resources in the provision of health services.

In addition, taking into account the conclusions of the previous works (Stelmach, 2017de), the time-series analysis of nights spent was also used to identify the development patterns of spa communes.

Results

The identified time series for SSD are presented on Figure 1.

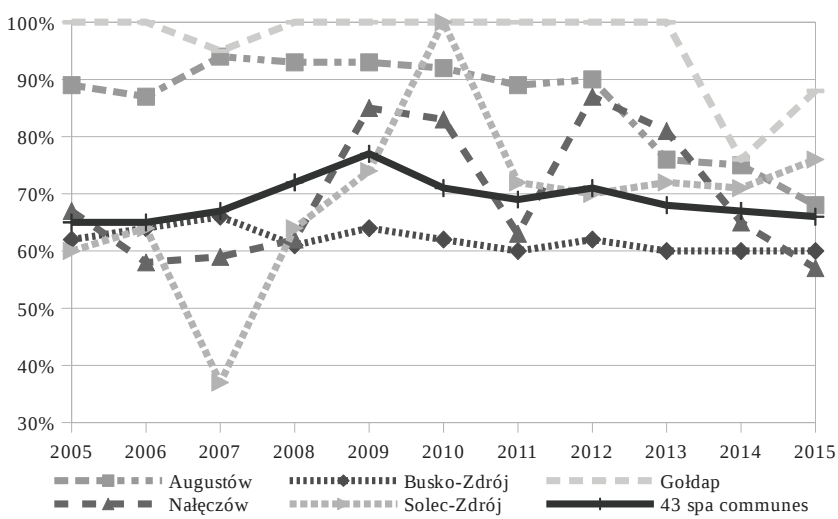
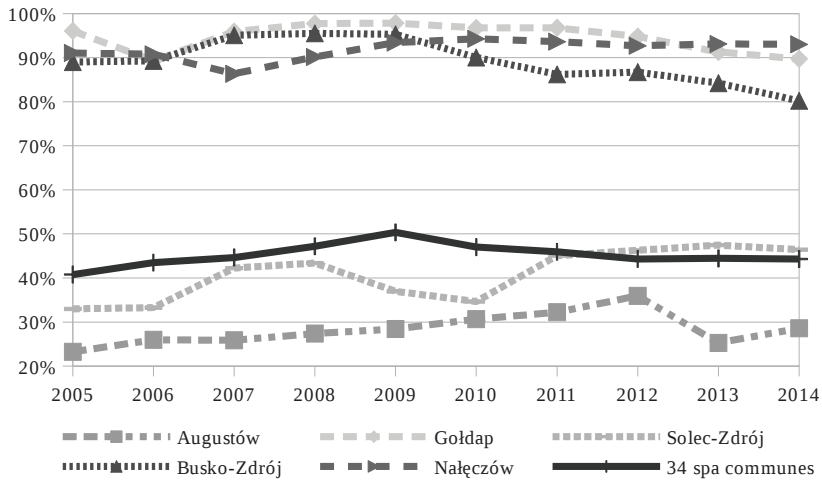


Figure 1. SSD in Eastern Poland spa communes: 2005–2015

Source: author, based on unpublished data from CSOP acquired from the Statistical Office in Kraków.

In Figure 1, there is a common pattern of growth in SSD can be seen. It is countercyclical (Mankiw, Taylor, 2016), i.e. inconsistent with economic cycles, which is evident especially in relation to the series of data referring to the 43 spa communes. A similar variation of the indicator, above national average can be noted for Busko, while the greater fluctuations can be seen in Nałeczów and Solec. In Augustów, Gołdap and Busko SSD is falling, whereas in Nałęczów and Solec is rising.

In turn, the identified time series for spa specialization is shown on Figure 2.



Note: Due to doubts about the value of Busko and Solec data in 2005, data interpolation was used by adopting for this year the same indicator value as in 2006.

Figure 2. Changes in spa specialization in in Eastern Poland spa communes: 2005–2014

Source: author, based on CSOP LDB.

In Figure 2, two groups of spa communes having different level of spa specialization are noticeable. In Nałęczów, Gołdap and Busko spa specialization is much above average for 34 Polish spa communes,[3] dominating in tourism specialization. In Solec and Augustów spa specialization is much lower, closer to national average. In Nałęczów, Solec and Augustów spa specialization is rising, whereas in Gołdap and Busko falling. Spa specialization indicator variability for 34 communes is countercyclical (Mankiw, Taylor, 2016), i.e. negatively correlates with periods of economic growth.

Considering importance of number of nights spent as a key variable correlated with destination revenues from visitors spendings, in Figure 3 time-series of that variable is shown.

[3] For nine communes data for counting that indicator was not avaiable.

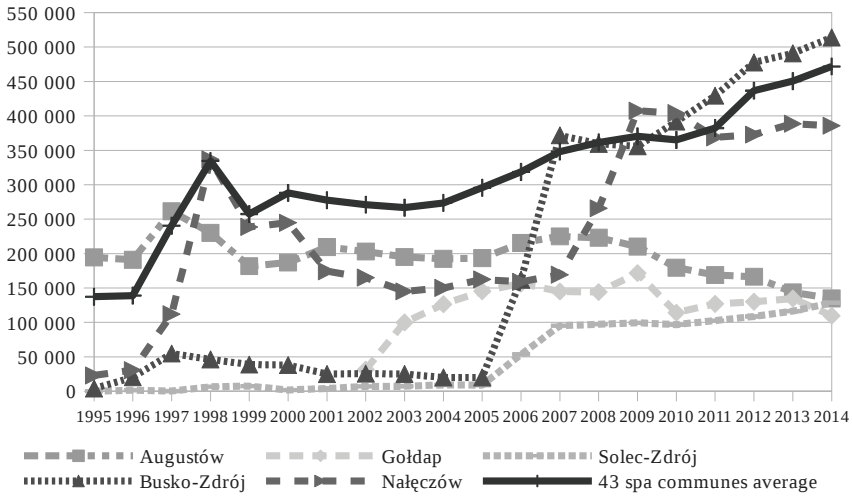


Figure 3. Number of nights spent in in Eastern Poland spa communes: 1995–2014

Source: author, based on CSOP LDB.

For 43 communes, Busko, Nałęczów, Gołdap and Solec number of nights spent is rising, whereas for Augustów falling. From 2009 to 2014 number of nights spent in Busko and Nałęczów was close to national average, i.e. approximately between 400 and 500 thousand, whereas in Augustów, Solec and Gołdap between 100 and 200 thousand.

Table 2 shows outcomes for the correlation analysis.

Tabela 2. Spearman's correlation coefficients between SSD and spa specialization: 2005–2014

Augustów	Busko	Gołdap	Nałęczów	Solec	The critical value of the correlation coefficient for N = 10 and p = 0.05 (two-sided critical area)
0.11	0.53	0.17	**0.6**	0.2	0.65

Source: author, based on CSOP LDB and unpublished data from the Statistical Office in Kraków.

For Nałęczów and Busko were estimated high and (in case of Nałęczów) close to statistical significancy positive relation between SSD and spa specialization, whereas for Augustów, Gołdap and Solec correlations were weak, positive and insignificant.

Outcomes of regression analysis are shown in Table 3.

Verification of the statistical significance of the explanatory variable, with the level $\alpha = 0.05$, was based on the hypotheses:

H_0: independent variable significantly influences the dependent variable,

H_1: independent variable does not significantly affect the dependent variable.

Tabela 3. Ordinary least squares estimation for spa specialization dependent variable and SSD independent variable

Commune	Coefficient		p value	R^2	Akaike information criterion
Nałęczów	intercept	0.96	<0.0001	**0.41**	–49
	SSD	0.13	0.047		
Gołdap	intercept	–0.01	0.82	0.05	–8
	SSD	–0.12	0.52		
Busko	intercept	0.39	<0.0001	0.04	6
	SSD	0.01	0.6		
Augustów	intercept	0.29	<0.0001	0.03	–35
	SSD	0.09	0.65		
Solec	intercept	0.4	0.007	0.01	–8
	SSD	0.07	0.83		

Source: author.

As Table 3 shows, the statistically significant and moderately matched dependence of spa specialization on SSD for Nałęczów were obtained. In other cases dependencies proved to be unmatched and statistically insignificant.

Conclusions

The research made it possible to answer the research question posed. The above-mentioned research results confirm the regularities identified in previous study (Stelmach, 2017d), thanks to analysing 22 Polish spa communes from Kujawsko-Pomorskie, Pomorskie, Podkarpackie, Małopolskie, Śląskie, Lubelskie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie voivodeships:

1. The strenght of relation in question is varied, with two groups of communes separated: ten communes with stronger and statistically significant relationships (Horyniec, Ciechocinek, Inowrocław, Solina, Ustka, Uście Gorlickie, Kraków, Ustroń, Goczałkowice, Nałęczów) and twelve with weaker and statistically insignificant (Brześć Kujawski, Sopot, Iwonicz, Rymanów, Krynica, Szczawnica, Muszyna, Rabka, Augustów, Busko, Gołdap, Solec). Noteworthy, in the case of a small number of observations it is more difficult to confirm the statistical significance of the correlation coefficient, and to achive this it is needed to identify a high-power correlation.
2. Within the group of communes for which the relationships are statistically significant, spa specialization is usually positively correlated to SSD, SSD significantly influence on spa specialization, SSD is rising, spa specialization is rising, nights spent number is rising.
3. Four different development patterns of spa communes were identified and evaluated:
   – the rise of nights spent connected with the growth of spa specialization and the rise of SSD (Ciechocinek, Solina, Uście Gorlickie, Ustroń, Nałęczów) – a risky combination of trends due to growing dependence on state distribution channel,

- the drop of nights spent connected with the rise of spa specialization and the growth of SSD (Ustka) – double negative combination of trends, due to overlap in the fall of night stays and growing dependence on state distribution channel,
- the rise of nights spent connected with the fall of spa specialization and the drop of SSD (Kraków i Goczałkowice) – a positive combination of trends due to growing destination revenues in the segment of valuable customers, such as tourists sleeping outside the spa establishments and commercial spa patients,
- the rise of nights spent connected with the growth of spa specialization and the decrease of SSD (Horyniec i Inowrocław) – a positive combination of trends due to base the growth of destination revenues on valuable clients, as in this case commercial spa patients.

To sum all, using number of nights spent variable, because of its correlation with destination revenues from visitors service it's worth to evaluate identified spa destinations development patterns, conditioning existence of link between number of nights spent and analysed indicators. Verification of this assumption deserves further research.

The limitations of this study are as follows. Firstly, it focuses on the case of one single country from Central Europe. Secondly, 22 Polish spa communes have been analysed, representing about half of the population of spa communes in Poland. Thirdly, secondary data analysis was limited to period from 2005 to 2015. Fourthly, SSD indicator concerns only spa inpatients, omitting outpatients. These four facts together limits the spatial, temporal and objective possibility of the findings generalization.

References

Central Statistical Office of Poland Local Data Bank. Retrieved from: https://bdl.stat.gov.pl (31.08.2017).

Derco, J., Pavlisinova, D. (2016). Financial position of medical spas – the case of Slovakia. *Tourism Economics*, *4* (23), 867–873.

Dryglas, D., Różycki, P. (2016). European spa resorts in the perception of non-commercial and commercial patients and tourists: the case study of Poland. *E-review of Tourism Research (eRTR)*, *1/2* (13), 382–400.

Dryglas, D., Różycki, P. (2017). Profile of tourists visiting European spa resorts: a case study of Poland. *Journal of Policy Research in Tourism, Leisure and Events*, *3* (9), 298–317.

Dryglas, D., Salamaga, M. (2017). Applying destination attribute segmentation to health tourists: A case study of Polish spa resorts. *Journal of Travel and Tourism Marketing*, *4* (34), 503–514.

Kozarkiewicz, A., Kabalska, A. (2017). Kuracjusz i klient: ewolucja propozycji wartości w modelach biznesowych przedsiębiorstw uzdrowiskowych w Polsce. *Marketing i Rynek*, *10* (CD), 296–309.

Mankiw, N.G., Taylor, M.P. (2016). *Makroekonomia*. Warszawa: PWE.

Romanova, G.M., Vetitnev, A., Dimanche, F. (2015). Health and wellness tourism. In: F. Dimanche, L. Andrades (eds.), *Tourism in Russia: A Management Handbook* (pp. 231–287). Bingley: Emerald.

Stelmach, P. (2017a). Struktura dystrybucji usług uzdrowiskowych a funkcja uzdrowiskowa gmin. Koncepcja i wstępne wyniki badań. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *473*, 552–561.

Stelmach, P. (2017b). Trendy dystrybucji usług uzdrowiskowych w gminach województwa podkarpackiego. In: B. Gierczak-Korzeniowska, P. Żegleń (eds.), *Turystyka a rozwój regionalny – szanse, wyzwania, perspektywy*. Rzeszów: Uniwersytet Rzeszowski, in press.

Stelmach, P. (2017c). Spa Services Distribution And Specialization In Kujawsko-Pomorskie, Pomorskie And Podkarpackie Voivodeships Communes. *Turyzm*, *1* (27), 63–70.

Stelmach, P. (2017d). Struktura dystrybucji usług uzdrowiskowych a funkcja uzdrowiskowa gmin małopolskich. *Studia Oeconomica Posnaniensa*, in review.

Stelmach, P. (2017e). Struktura dystrybucji usług uzdrowiskowych a funkcja uzdrowiskowa gmin śląskich. *Prace Geograficzne*, in review.

Szromek, A.R., Romaniuk, P., Hadzik, A. (2016). The privatization of spa companies in Poland – An evaluation of policy assumptions and implementation. *Health Policy*, *120*, 362–368.

Vrkljan, S., Hendija, Z. (2016). Business performance of health tourism service providers in the Republic of Croatia. *Acta Clinica Croatica*, *1* (55), 79–85.

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IMPACT OF SELECTED FACTORS ON THE CROSS-BORDER PRICE OF POSTAL PARCELS IN THE EUROPEAN UNION

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Abstract

The aim of the article is to analyze the impact of selected variables on the difference in cross-border price postal parcels weighing up to 2 kg offered by twenty-eight designated postal operators in the European Union countries in 2015 based on 756 collected observations. The study used data from Eurostat, the Universal Postal Union and the financial statements of designated postal operators. The base were nineteen indicators verifying the hypotheses about impact of selected groups of variables on the cross-border price. Moreover the analysis has been extended of electronic postal services indicators provided by designated postal operators, as defined by the Universal Postal Union, for selected countries. The results of the analysis confirm the complexity of the factors that affect the cross-border prices used by operators.

Introduction

The European Commission (2012) published a green paper on cross-border parcel delivery as a boost to development of e-commerce in the European Union. The purpose of the green paper was to create a single market for delivery services in response to the increasing share of online shopping, especially cross-border, that would contribute to the improvement of this market segment in European countries and would bring benefits of

economic growth and job creation. Ensuring affordable and good quality cross-border parcel delivery services is also documented in another European Commission publication – A Digital Single Market Strategy for Europe (2015). European Commission conclude that cross-border delivery services can increase consumer confidence in cross-border online sales, because the lack of regulation in this area leads to a lack of transparency and interoperability between different entities dealing with cross-border consignments and excessive costs of small postal mail.

The one of the most important restrictions in cross-border trade is the geographical distance between countries, however this variable can be replaced in the research by a cross-border price (Gomez-Herrera, Martens, Turlea, 2013). On the other hand, the high price of postal delivery services is one of the major barriers to the development of the e-commerce market in the European Union, both in sales and in purchase of products (Duch-Brown, Martens, 2015). Conducted in study for online stores in Western European countries, which were indicated that the choice of a cross-border priority delivery was positively correlated with the GDP per capita and the difference in time delivery between express and conventional services and negatively with the transport cost to the selected region and the difference in the price margin between the supply express and conventional delivery (Kim Dekker, Heij, 2016).

The development of cross-border trade is therefore dependent primarily on the postal delivery price. The results of the analysis identified several important factors influencing the difference in the price of cross-border parcels post, including: distance, country destination, tracking module, weight of a parcel and common border (Claes, Vergote, 2016).

The purpose of this article is to investigate the impact of selected variables on the price of a two-kilogram cross-border postal parcel, taking into account macroeconomic factors and financial data of public postal operators because, as point out, an appropriate policy on cross-border postal delivery requires adequate quality of statistics to forecast and assess the impact of their introduction (Marcus, Petropoulus, 2016).

Literature review

Okholm et al. (2016) indicated four factors related to the economies of scale that affect the price of cross-border postal parcels: volumes delivered, population density in the destination area, value added delivery features of delivery services and interoperability of postal networks. In addition, the price of the postal package was depending on degree of preparation of the parcel by the e-retailer and the content of the parcel, and may also be affected by a number of other cost factors, for example with: the business model of the delivery operator, labour costs, geography and exogenous factors like oil prices, currency risks, and traffic congestion.

Claes and Vergote (2016) analyzed the variability of the difference in the price of cross-border postal parcels between 25 European Union countries (excluding Cyprus, Estonia and Luxembourg) offered by designated operators. The dependent variable was defined as the percentage in difference between the cross-border and the domestic postal parcel price. The study used a series of variables that were divided in seven categories: product characteristics, single zone pricing, country groups, market structure, distance and demography, scale and cost factors. Conducted analysis showed that the impact on the difference in the cross-border package price was due to factors such as the distance, the use of premium tariffs, geographical classification of the country and the weight of the postal package, while the fit of the model measured by the R^2 factor was equal 0.422. It should be noted that most of the independent variables used were dummy variables, which could have influenced on the results.

Methodology

The analysis covered 756 observations on the cross-border price postal parcel weighing up to 2 kg from the price lists of 28 designated operators to other European Union countries.

The study based on the analyzed literature adopted following form of estimated model using Ordinary Least Squares regression (OLS):

$$price\_c_i = \alpha + \beta_i \times X_i + \varepsilon_i,$$

where:

$price\_c_i$ – natural logarithm of cross-border price postal parcel weighing up to 2 kg,

α – intercept,

X_i – matrix of explanatory variables,

ε_i – random component.

Based on the analysis of the significance of variables in the work Gomez-Herrera et al. (2013), Duch-Brown and Martens (2015), and Claes and Vergote (2016) 10 variables related to cross-border shipments and postal activity, 5 indicators relating to the economic environment and 4 variables related to the financial situation of postal operators were selected (Table 1).

Table 1. Select variables to the model

Variable	Description
price_s	Natural logarithm of the price of a postal parcel weighing up to 2 kg in the sender's country
price_r	Natural logarithm of the price of a postal parcel weighing up to 2 kg in the recipient's country
border	The dummy variable equal to one, if the countries have common border and zero otherwise
letter_price	Natural logarithm of the price of cross-border letter weighing up to 2 kg in the sender's country
distance	Natural logarithm of the distance expressed in kilometers between the capital of the country of the sender and the recipient
operator	The dummy variable equal to one, if the designated operator is the state company and zero otherwise
post_offices	Natural logarithm of the number of post offices in the sender's country in 2015
priority	The dummy variable equal to one, if a postal parcel weighing up to 2 kg could be sent as a priority parcel and zero otherwise
priority_price	Natural logarithm of the price of a priority postal parcel weighing up to 2 kg in the sender's country
tariff	The dummy variable equal to one, if a designated operator applies a single tariff price to all European Union countries and zero otherwise
e2e	The dummy variable equal to one, if a postal parcel is delivered between countries in the euro area and zero otherwise
years_liberalization	Number of years since market liberalization
min_salary	The dummy variable equal to one, if in the sender's country has minimum salary and zero otherwise
gdp	Natural logarithm of the GDP per capita in the sender's country
zone	The dummy variable equal to one, if sender's country belongs to the euro area and zero otherwise
net_revenue	Natural logarithm of net revenues from sales of an operator designated in 2015
net_revenue_3	The dummy variable equal to one, if net revenues from sales decreased in the period 2013–2015 and zero otherwise
net_profit	The dummy variable equal to one, if in 2015 the company generated a net profit and zero otherwise
net_profit_3	The dummy variable equal to one, if over the period 2013–2015 the negative net financial results were outweighed and zero otherwise
pes[1]	The value of the PES indicator for the sender's country

Source: own elaboration.

The following hypotheses were tested in the article:

H_1: The use of variables related to cross-border shipments and postal activity will allow the model to be adjusted to 0.95.

H_2: Enlarging the model with variables related to the economic environment will improve the fit of the original model.

H_3: Enlarging the model with financial variables will improve the fit of the original model.

H_4: Enlarging the model with PES indicator will improve the fit of the original model.

Results

Prior to the study, a Variance Inflation Factor test was performed on the occurrence of collinearity, which indicated that there was no collinearity in the model because no values were greater than 10 for the ten variables associated with cross-border shipments and postal activity and the mean value of the VIF test was 1.42.

In addition, the correlation matrix (Table 2) has shown a very strong, significant and positive relationship between cross-border price of postal parcel weighing up to 2 kg (**price_c**) and price of a priority postal parcel weighing up to 2 kg in the sender's country (**priority_price**), moderate (on strong boundary), significant and negative relationship between the distance (**distance**) and the having common border (**border**).

Table 2. Correlation matrix for the basic and significant variables used in the model

Variable	1	2	3	4	5	6	7	8	9	10	11
1. border	1.00										
2. distance	–0.59	1.00									
3. letter_ price		0.11	1.00								
4. operator				1.00							
5. post_ offices	0.11	–0.09	0.19	–0.20	1.00						
6. price_c	–0.19	0.31	0.40	0.10	0.12	1.00					
7. price_r	–0.19	0.31				0.09	1.00				
8. price_s		0.06	0.20	–0.17		0.43		1.00			
9. priority					0.14			–0.26	1.00		
10. priority_ price	–0.15	0.28	0.41	0.06	0.18	0.96	0.08	0.41	0.15	1.00	
11. tariff	0.06	–0.08	–0.23	–0.06	0.08			0.34	–0.26	–0.07	1.00

Source: own elaboration in RStudio.

Regression method performed with Ordinary Least Squares (OLS) for the ten basic variables (model 1) showed that seven variables were important in forecasting the cross-border price of the postal parcels (Table 3). Analysis for the model with constraints (model 2) showed that the seven variables identified in model 1 were significant. The value of the Wald test score of 0.91, means that a restriction model should be chosen. The decrease of the cross-border price of a postal parcel was affected by the common boundary between countries, number of post offices in the sender's country and possibility of sending a postal parcel as a priority parcel. In turn, increase of postal letter price, distance, price of priority parcel and sending parcels by the state-owned operator has increased the value of the dependent variable. However, the value of the R-squared factor at 94.2% means that the first hypothesis should be rejected.

Table 3. Regression results for each model

Model	(1)	(2)	(3)	(4)	(5)	(6)
price_s	−0.003 (0.007)					
price_r	0.000 (0.009)					
border	−0.038*** (0.014)	−0.038*** (0.015)	−0.031** (0.014)	−0.040*** (0.014)	−0.029 (0.018)	−0.041*** (0.011)
letter_ price	0.024** (0.010)	0.025*** (0.010)	−0.001 (0.010)	0.019* (0.010)	0.197*** (0.023)	
distance	0.012* (0.007)	0.012* (0.006)	0.014** (0.006)	0.004 (0.006)	0.011 (0.009)	
operator	0.058*** (0.014)	0.060*** (0.013)	0.046*** (0.015)	0.037** (0.015)	0.080*** (0.017)	0.042*** (0.012)
post_ offices	−0.006** (0.003)	−0.006** (0.003)	−0.008*** (0.003)	0.007 (0.004)	−0.035*** (0.005)	0.030*** (0.006)
priority	−0.118*** (0.007)	−0.116*** (0.007)	−0.130*** (0.007)	−0.134*** (0.009)	−0.140*** (0.013)	−0.135*** (0.008)
priority_ price	0.930*** (0.011)	0.927*** (0.010)	0.932*** (0.011)	0.936*** (0.011)	0.854*** (0.020)	0.921*** (0.009)
tariff	−0.002 (0.008)					
e2e			0.001 (0.008)			
years_ liberalization			0.004*** (0.001)			0.006*** (0.001)
min_ salary			−0.007 (0.010)			
gdp			−0.035*** (0.008)			0.030*** (0.011)
zone			−0.017* (0.010)			−0.016** (0.008)
net_ revenue				−0.014*** (0.003)		−0.036*** (0.005)
net_ revenue_3				0.006 (0.009)		
net_ profit				−0.071*** (0.020)		−0.111*** (0.018)
net_ profit_3				−0.057** (0.022)		
pes					0.015 (0.035)	
Intercept	0.059 (0.057)	0.056 (0.054)	0.473*** (0.102)	0.190*** (0.061)	0.063 (0.082)	0.003 (0.122)
No. of obs.	756	756	756	756	405	756
R^2	94.2%	94.2%	94.6%	94.5%	92.3%	95.1%

*** *p-value* < 0.01, ** *p-value* < 0.05, **p-value* < 0.10

Source: own elaboration in RStudio.

Expanding the model with variables related to the economic environment (model 3) has increased the fit of the model, which means that there is no reason to reject the second hypothesis. Three of the five variables turned out

to be significant, with the number of years in since market liberalization positively affecting the cross-border price, while the size of GDP per capita and delivered parcel in the euro zone were negatively correlated.

Also expanding the model with financial variables (model 4) increased the fit of the model which means that there is no reason to reject the third hypothesis. Of the four variables, only a decrease in net revenue from sales over a three year period was irrelevant, but statistically positive, while the growth of the net revenue from sales, net income in 2015 and an outweighed the negative net financial results in the period 2013–2015 affected to increase the cross-border price.

Inclusion in the model of electronic postal services indicator (model 5) reduced the number of observations to 405, because values were only available to 15 European Union countries. The PES indicator was statistically insignificant, and its inclusion reduced the fit of the model, so a fourth hypothesis should be rejected.

Analysis using all variables, and then limiting it to only relevant indicators (model 6) showed that the cross-border price was affected by ten variables. The size of the dependent variable was reduced by the dispatch of the consignment to the country with a common border – by 4.1%, the possibility a giving postal parcel as a priority parcel – by 13.5%, membership in the sender's country in euro zone – by 1.6%, increased in net revenues of sales and achieved a net profit in 2015 – by 11.1%. On the other hand, the increase in cross-border price was influenced by the ownership form of the operator, increase number of post offices – by 3.0%, increase priority price of the postal package, number of years since market liberalization and increase GDP – by 3.0%.

Conclusions

Okholm et al. (2016) have identified six factors affecting the development of cross-border e-commerce: experience/trust delivery, regulation as a driver, geographic/cultural drivers, technological drivers, operational drivers and price/cost drivers. The last factor associated with exchange rate fluctuations and the costs of dealing in other currencies and delivery prices charged by e-retailers may influence consumers' willingness to shop online.

The analysis showed that the impact on the cross-border price of postal parcels weighing up to two kilograms has many factors related to the activities of designated postal operators, but also its financial and economic environment. Sending a parcels to a country with a common border, the possibility of giving postal parcel as a priority parcel, membership in the sender's country in euro zone, increase in net revenues of sales and achieving a net profit in 2015 have contributed to a reduction of the cross-border price. On the other hand, the ownership operator form, the increase in the number of post offices, increase in priority price of the postal package, number of years since market liberalization and increase of GDP influenced in the growth of the dependent variable.

Identifying the factors affecting the cross-border price may help to increase the importance of e-commerce, however does not have to affect the decline in prices of products offered through online channels. In addition, the increased importance of cross-border e-commerce should be reflected in developing appropriate measures to support its development, which should contribute to job creation and stimulate economic growth (Duch-Brown, Grzybowski, Romahn, Verboven, 2017).

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PES (Postal Electronic Services Index) – indicators of electronic postal services, as defined by Universal Postal Union (UPU).

References

Claes, A., Vergote, W. (2016). *Econometric study on parcel list prices*. Retrieved from: http://ec.europa.eu/DocsRoom/documents/14647 (13.09.2017).

Duch-Brown, N., Martens, B. (2015). *Firm barriers to cross-border e-commerce in the EU Digital Single Market.* Retrieved from: https://ec.europa.eu/jrc/sites/jrcsh/files/JRC96872.pdf (13.09.2017).

Duch-Brown, N., Grzybowski, L., Romahn, A., Verboven, F. (2017). The impact of online sales on consumers and firms. Evidence from consumer electronics. *International Journal of Industrial Organization*, *52*, 30–62. DOI: http://dx.doi.org/10.1016/j.ijindorg.2017.01.009.

European Commission (2012). *Green paper an integrated parcel delivery market for the growth of e-commerce in the EU.* Retrieved from: http://ec.europa.eu/internal_market/consultations/docs/2012/parcel-delivery/121129_green-paper-parcel-delivery_en.pdf (13.09.2017).

European Commission (2015). *A Digital Single Market Strategy for Europe*. Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0192&from=EN (13.09.2017).

Gomez-Herrera, E., Martens, B., Turlea, G. (2013). The drivers and impediments for cross-border e-commerce in the EU. *Information Economics and Policy*, *28*, 83–96. DOI: http://dx.doi.org/10.1016/j.infoecopol.2014.05.002.

Kim, T., Dekker, R., Heij, C. (2016). *The value of express delivery services for cross-border e-commerce in European Union markets*. Retrieved from: https://repub.eur.nl/pub/79921/EI2016-12.pdf (13.09.2017).

Marcus, J.S., Petropoulos, G. (2017). E-commerce in Europe: Parcel delivery prices in a digital single market. In: *The Changing Postal and Delivery Sector* (pp. 139–159). Springer International Publishing. DOI: http://dx.doi.org/10.1007/978-3-319-46046-8_10.

Okholm, H., Boivie, A., Wahl, J., Jensen, K., Nygard, A., Basalisco, B. (2016). *Principles of e-commerce delivery prices*. Retrieved from: www.posteurop.org/NeoDownload?docId=456601 (13.09.2017).

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PARTICIPATION OF CITIZENS IN THE CREATION OF PUBLIC SERVICES IN MAŁOPOLSKA AND PIACENZA

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Abstract

In recent years, the participation of citizens in public life plays an increasingly important role in the management, in particular in local government units at the local level. Changes in the needs and demands of citizens have led to the fact that social participation has effectively transformed itself into active, effective and multidirectional action. Local communities are becoming more aware of the fact that their active participation in public life, based on multilevel and multi-sectoral cooperation, depends on the quality of public services. The purpose of this paper is to show opportunities and different solutions of influence citizens on the shaping of public services in selected local governments units on the same level in Italy (Piacenza) and Poland (poviats in Małopolska).

Introduction

Nowadays, rapidly progressive socio-economic development caused that changed the expectations of citizens to services provided by the public services. In countries where democratic systems exist, there are numerous legal regulations and a broad set of instruments to oversee the proper performance of public authority tasks at various levels of activity. This control, which is a part of public management is institutionalized in the vast majority of cases

and in recent years the need for social control has become more and more evident. The implementation of this control is possible, inter alia, through the use of tools ensuring effective cooperation between citizens and the public authorities. While direct co-operation between the public and central government is limited, it is possible and desirable at the local government level. Citizens should participate in the decision-making process, and the requirement for effective management in local self-government units is, firstly, equipping local communities with actual and authentic entitlements, and secondly, realizing their enormous role and impact.

It is therefore appropriate to check and demonstrate how local communities in Italy and Poland participate in the shaping of public services to which the local authorities are obliged in both countries. In the paper tried to show the different role of citizens in shaping local politics and analyzed the strategic planning process in Piacenza and Małopolska, where were taking into account the strategies for solving social problems, because the activity of local authorities in the social sphere, focused on problem solving, it includes the provision of certain services.

In the article there were used various methods and techniques of research. Inter alia there used the descriptive, comparative and tabular – descriptive method. There were analyzed documents and data in territorial self-government units and statistical data published by national institutions.

The article is the result of international pilot studies conducted jointly by universities Università Cattolica del Sacro Cuore and Jagiellonian University.

International determinants of public participation

The essence of participation in public affairs management is that public administrations, both governmental and local government, interact with the citizens through the use of specific participatory and consultative procedures (Hausner, 2008). The introduction of participation there are in favor of both ideological considerations (a reference to the democratic ideas) and practical considerations (increase effectiveness, improvement and adaptation of services) (see Ober, 2017). The key element of such governance is public participation, which has been recommended internationally at the international level (OECD, European Commission) since the 1990s. This participation includes four main forms of public participation in public life:

- public activity (actions initiated by local community members in the form of lobbing, protest, advocacy, civil disobedience),
- involvement of citizens (actions initiated by public authorities – for example in the form of public consultations);
- electoral participation (activities involving participation in elections and referendums), and
- compulsory participation (compulsory actions – for example paying taxes to a given community) (Kaźmierczak, 2011).

In Poland, from the point of view of influence on the current activities of the territorial unit and the provision of its public services, a key role plays engaging of citizens and electoral participation. In Italy only electoral participation contributes to shaping services at the local level, and citizens rather are not interested in directly influencing the shaping of local strategy documents.

It is worth emphasizing that the involvement of citizens in public life in specific countries depends on a number of issues, including: cultural nature (the willingness of the society to co-manage), economic (specific financial resources), political (openness to cooperation with citizens and acceptance of certain forms of cooperation with Authority side) and technical (established rules and procedures) (Zybała, 2013).

Citizen participation in shaping public services in poviats of Małopolska

There are many forms of direct or indirect participation in the Polish legal system, including information; consultation, including participatory budget institutions or civic initiative adopt resolution; delegation; cooperation, local initiative, and of course the general elections and local referendas (see Dobrowolski, Kożuch, Pypłacz, Sasak, Szczudlińska-Kanoś, Žukovskis, 2016). It should be emphasized that the selection of the above mentioned solutions, even despite the lack of regulatory work in the part of local governments on the basis of statutes, regulations, or various other regulations, agreements and their practical use is characterized by great diversity.

Talking about citizen involvement in public management, it is important to address to the issue of local strategy documents, which are increasingly influenced by the opinions of local community members. In Poland, one of the strategic documents that is compulsory at the local level is a strategy for solving social problems. Mandatory creation of this type of strategy has been imposed by the legislature and results in the implementation of a number of legal acts, which should include in particular the Act of 12 March 2004 on social assistance (see Szczudlińska-Kanoś, 2015).

For the purposes of this article, authors have analyzed the strategies of solving the social problems functioning in all 22 poviats of Małopolska (19 poviats and 3 cities with poviat rights). Preliminary analysis of the documents showed that such strategies were developed in all self government units, although some documents were developed after the deadline. The main reason for the above was the prolonged participatory character of the whole process. The carried out analyzes showed that the documents, despite the absence of repeated references corresponded with the strategic documents developed at higher levels – regional, national and international level. The analysis shows that the diagnostic part of the strategies is to a large extent elaborated. Its content fluctuates between 40% to almost 90% and covers an average of 76% of the document. The goals of the district strategies for solving social problems in Małopolska are different, as are the diagnoses presented in them. In the strategies there declared that the selection of priority areas was the result of an analysis of the current social situation of poviats, although most often elaborated on the basis of quantitative data, external environment analysis and statutory requirements. In general, the issues in the strategies concerned: broadly understood support for families, particularly those at risk of exclusion, foster families, inadequate care and education; childcare; help the elderly and the disabled; promotion of employment; professional activation; and strengthening the cooperation of entities implementing social policies of poviats.

In 64% of the poviats, at the declarative level, there appeared the participation of representatives of public and non-governmental institutions. In the 30% of the poviats during the preparation of the strategy there were organized the workshops, where participated the representatives of the local government representatives, the representatives of the social welfare and labor market institutions, the representatives of the Police, the organizations of the third sector and possibly the social leaders.

Only 21% of the poviats declared co-creation of the strategy with the inhabitants. Only two of them indicated the form of consultation, which was the questionnaire delivered to residents through social assistance centers and non-governmental organizations. This polls were also posted on the website. It should also be noted that the share of inhabitants in the process of creating strategies more frequently appeared in newer strategies. As many as 77% of the strategies that indicated the participation of members of the community were developed after 2014. This fact would have a negative impact on the quality of the strategy, because the lack of contact with the inhabitants has in principle prevented the identification of new social problems and also increased the likelihood that the adopted

documents do not fully correspond to the actually existing needs, so the local government units will not be testified to suit the needs of residents of public services.

Participation of Italian citizens in shaping public services looks very different. Citizens only have an indirect influence on the creation of strategic documents in local governments, as exemplified by the strategic planning process described below in Piacenza.

The strategic planning process of the Italian local governments: the case of the province and the city of Piacenza

In 2011 the Italian Central Government passed a reform (Sicilia, Steccolini, 2017) on local governments. A new managerial tool was introduced: the unique document of planning (DUP in Italian) (Bleyen, 2017). Previously Italian local governments were used to produce many different documents aimed at planning and programming and linking the priorities with the budget. With the 2011 reform all the municipalities had to implement the same document with the same structure and the same aims. It is a 3 years document with a rolling process so each each a new period is added (2017–2019 document approved in 2016 becomes the 2018–2020 in 2017 and so on in the forthcoming years).

The DUP represents the framework and the linking pin with all the other managerial documents the Italian municipalities have to produce (e.g. budget, Performance plan) and it is strictly linked to the with the political agenda of the Mayor. In Italy before the election each candidate has to produce a document that represent the agenda for his/her government in case he/she should win the election. The DUP is made of two sections: the strategic and the operative parts. The strategic part presents the Key performance areas of the municipality for the next three years while the operative one address the implementation plans so to translate the strategy into actions. The DUP has to be approved by the city council yearly and it usually presents in its first part a SWOT analysis of the local government. The DUP and specifically the operative part represents the long term objectives and the priorities of the municipality and it is linked to two managerial tools the annual budget and the performance plan. The annual budget allocates the financial resources to the different actions for that specific year with the performance plan cascades the organizational objectives internally at unit and at personal level too.

In Italy all the public managers are given annual goals (financial and non financial goals) linked to the DUP and to the annual budget. If the individual targets are met financial incentives are given to the managers. Each single municipality has an independent body appointed for three years (renewable) in charge of measuring the individual and the overall performance of the organization (yearly production of a performance report).

Table 1. Strategic planning in Italian local governments

Document	Aim	Duration	Approved by
DUP	Strategic planning	3 years rolling	City council
Performance plan	Programming and cascading internally the annual goals on the first year	3 years rolling	Mayor and his/her delegates
Performance report	Performance measurement	1 year	Indipendent body produces it and then it is acknowledge by the Majoyr

Source: own study.

According with the Italian law all these documents have to be uploaded on the local municipality website. In this paper it will be analyzed the case of the City of Piacenza, a municipality of 102,000 inhabitants, place in the northern part of Italy and specifically in the EMILIA ROMAGNA Region. It is located by the Po river and it was founded by the Romans in the 3rd Century B.C.

The 2017–2019 DUP (the document aimed at managing the strategic planning process for the Italian municipalities) has been approved by the City Council on Sept 12th 2016. It is structured according with the 2011 law and divided in to parts: the strategic and the operative ones.

The strategic part presents a SWOT analysis of the City and strategic Goals. They are 11:

1. Economic Development for competitive City.
2. Innovation, research and university for a smart.
3. Health care, solidarity and social cohesion for a friendly city.
4. Environment for a sustainable city.
5. Mobility for a interconnected city.
6. Safety for a peaceful city.
7. Young generations and educational system for the city of the future.
8. Culture, tourism, free time and sport for educated city for the active city.
9. Protection and development of the territory for an attractive city.
10. Active citizenship and social inclusion for a engaged city.
11. Serving the communities for an efficient city.

Each of these strategic goals is then in detail described.

The last point of the strategic part is related to transparency and on the how the local government of Piacenza will report to the citizenship. The DUP clearly states that the social reporting will be twofold: annually with the discussion of the city council on the performance and right before the new election day with the final document produced by the administration in charge (strategic control). The operative part takes into consideration each single strategic objective describing how are in charge of implementing it, which are the involved stakeholders and which are the missions and the actions/programs to be implemented in the next three years. At the end of this part the DUP presents the budgeting system for the forthcoming years in term operating and capital expenditures and operating and capital revenues. This is aimed at linking the strategic goals, the strategic objectives and the action plans with the resources available and allocated. After having presented the content and the structure of the DUP, the new strategic planning tools implemented by the Municipality of Piacenza and for all the Italian local governments by the 2011 reform it is important to analyze the pros and cons of this managerial tool. As all the managerial tools it is neutral by definition it can be used in order to help managing the city or just in a bureaucratic way.

In term of transparency the documentation is uploaded on the city website (it is the law) but if the question is: will the citizens ever read it? The answer is no, it is a 301 pages long document, none will ever read it. It has internal purposes, managerial and political purposes, city managers and politicians are familiar with that document, the citizenship is not even aware of the existence of it; but it is available on the web. Each single municipality has its DUP posted on its website within the transparency folder. So the tool is there but the population is not engaged not aware and, perhaps not even able to understand that document. The average Italian citizen does not understand the different between a goal and an objective, and objective and a measure, a measure and its target. So from a managerial perspective this is way all these documents have to be approved by the city council and the discussion

will never get published or televised by the local media because the citizens are not interested nor involved if not indirectly through their representative: the city councilmen/women.

Conclusions

From the above analysis it is clear that the influence of citizens on shaping public services in local governments in Poland and in Italy is clearly different. In Italy, the dominant form of governance is indirect democracy, otherwise called a representative, where citizens do not directly participate in the drafting of strategic documents, and their expectations are expressed primarily by voting in elections and through greater control of the authorities. In Poland over the last decade there has been an increase in public interest in public affairs. Communities see the need to co-decide on the quality and quantity of local public services and are more likely to be involved in the creation of strategic documents, although they are not always able to. It is therefore necessary to strengthen and regulate any direct forms of participation of citizens.

Finally, it is worth emphasizing that the study carried out by the Institute of Public Affairs shows that, from the point of view of participation in Poland, it is important that the services are universal and concern the general public and that they are selective and satisfy only specific needs, solve specific problems. It turns out that the type of services affects the level of participation (see Kaźmierczak, 2012). Using public services is not motivating for participation unless an initiative in this area comes from the service provider. Attendance in participation increases with individualization of services.

The pilot studies and conclusions drawn from them should be a contribution to their continuation. However, studies should be conducted with due diligence of statistical representativeness.

References

Bleyen, P., Klimovský, D., Bouckaert, G., Reichard, C. (2017). Linking budgeting to results? Evidence about performance budgets in European municipalities based on a comparative analytical model. *Public Management Review*, *7* (19), 932–953.

Dobrowolski, Z., Kożuch, A.J., Pypłacz, P., Sasak, J., Szczudlińska-Kanoś, A., Žukovskis, J. (2016). *Participation as a management tool in local government units*. Scientific Society of Contemporary Management and Business and Rural Development Management Institute Kraków, Kowno.

Hausner, J. (2008). *Zarządzanie publiczne*. Warszawa: Wydawnictwo Naukowe Scholar.

Kaźmierczak, T. (2011). Partycypacja publiczna: pojęcie, ramy teoretyczne. In: A. Olech (ed.), *Partycypacja publiczna. O uczestnictwie obywateli w życiu wspólnoty lokalnej* (pp. 84–99). Warszawa: Instytut Spraw Publicznych.

Kaźmierczak, T. (2012). Udział mieszkańców gmin w zarządzaniu gminnymi usługami publicznymi. In: A. Olech (ed.), *Dyktat czy uczestnictwo. Diagnoza partycypacji publicznej w Polsce*, Tome I (pp. 92–103). Warszawa: Instytut Spraw Publicznych.

Ober, J. (2017). *Demopolis: democracy before liberalism in theory and practice.* Cambridge: Cambridge University Press.

Sicilia, M.F., Steccolini, I. (2017). Public Budgeting in Search for an Identity: State of the Art and Future Challenges. *Public Management Review*, *7* (19), 90–95.

Szczudlińska-Kanoś, A. (2015). Participatory democracy to the contemporary problems of Polish social policy. *World Academy of Science, Engineering and Technology International Journal of Humanities and Social* Sciences, *6* (9), 1988–1994.

The Act of 12 March 2004. *On social assistance.* OJ 2004 No. 64 pos. 593.

Zybała, A. (2013). Warunki dobrej partycypacji. Animacja Życia Publicznego. *Zeszyty Centrum Badań Społeczności i Polityk Lokalnych*, *2* (9).

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CROWDSOURCING AS A CHALLENGE FOR ADVERTISING AGENCIES IN THE CREATIVE SERVICE MARKET

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Abstract

The article contains theoretical deliberations concerning the usage of crowdsourcing platforms in order to obtain creative resources necessary to design advertising services. The article also aims at defining what role crowdsourcing can play in the creative service market. The first part of the article presents the characterization of advertising as creative services and the role of crowdsourcing in gaining creative ideas. The concept of crowdsourcing platforms used as a way of gaining creative resources and creating ideas constituting the basis of the offered advertising services was presented in the form of examples in the next part of the article.

Introduction

Crowdsourcing as an effective concept of leveraging dispersed resources from a crowd has been used in various fields of activity. This also applies to advertising services performed by advertising agencies in the creative service market. Activities of advertising agencies are focused on providing buyers with creative ideas in order

to highlight their products and services in the market. The descried situation creates the need for an advertising agency to obtain the access to creativity resources and is a major challenge for its business tasks.

The aim of the article is to indicate the development potential of advertising services using crowdsourcing, as well as to characterize entities applying the indicated concept in business practice.

The paper uses the methods of literature review, analysis of exemplary crowdsourcing platforms and synthesis.

The role of crowdsourcing in the creative service market

Advertising services belong to the creative service sector and are offered by companies that derive income from the sale of their time and transfer of the rights to their intellectual property to other businesses entities or organizations. Advertising services, being creative services, are characterized by the following set of attributes:

- a significant importance of creativity in the creation of advertising service core,
- an innovative work conceived as a result of a creative specialist's work,
- no possibility to objectify the performed activities and effects of service process related to them,
- the competencies of professionals are based primarily on unique abilities and gathered experience.

Entities performing advertising services are required to possess specific competencies in the scope of creation and performance of creative ideas in various areas of promotion and image-building activities. According to the American Association of Advertising Agencies, advertising agencies that act as entities offering creative services are independent organizations gathering creative and entrepreneurial people who specialize in preparation and realization of promotional plans and tools (Wiktor, 2001). Entities operating in the advertising service market can be distinguished from others by:

- the scope of the service offered and the degree of specialization,
- type of customer serviced,
- the organization's structure and number of employees.

Therefore, for many years the creative service market has been characteristically divided between global advertising companies whose clients are international brands, and smaller, specialized local advertising agencies. Global advertising companies have in their organizational structures departments responsible for delivering creative ideas and solutions. Apart from the employed specialists, creative departments, may if needed, benefit from the work of independent designers. Moreover, cooperation is underpinned by outsourcing, while the individual designers create, among others, graphic designs, advertising messages, name, and corporate logos based on precisely defined expectations. The scope of works depends primarily on advertising activity. However, it should be noted that the number of designers cooperating with an agency is usually limited and that competencies are strictly defined and verified. The added value offered by global advertising agencies is enriching the core of an advertising service with additional services, such as advising on the selection of marketing strategies, market research, including preliminary tests of developed projects, and supervision of the implementation of developed ideas. The extensive offer of additional services allows such agencies to keep attractive brands in an order portfolio.

In case of the latter group, i.e. small local agencies, it is expensive to maintain a bigger group of designers responsible for creative ideas in organizational structures. The main reason for this is a limited access to big advertising budgets that make it is possible to maintain creative specialists. Although such entities often benefit from the work of independent designers, their cooperation is threatened by poor quality of the offered ideas. Advertising agencies in the described group less often add additional services to the creative core and, in turn, focus only on

providing ideas. Usually their offer is limited to graphic designs, preparation of advertising texts, or the basis of visual identification systems.

Limitations of both types of advertising agencies are related first and foremost to the crucial resource that, in described services, is creativity. A characteristic feature of this resource is that it is not related to a particular profession, education, or place of residence. Creativity is dispersed in the crowd and its acquisition requires creation of a favourable co-operation between the parties: the designer and the contractor of the creative service.

The answer to the above-mentioned challenge is crowdsourcing. Following the definitions of J. Howa (2006) G. Kazai (2011) and M. Poetz (Poetz, Schreier, 2012), crowdsourcing can be described as an enterprise's or institution's activity leading to acquisition of dispersed resources belonging to heterogeneous crowd by means of online public inquiry. Such resources may be information, knowledge, experience, ideas, skills, free time, work, or financial resources.

One of the key resources for crowdsourcing is creativity, understood here as an ability to solve problems and create ideas for a new product, graphic design, logo, advertising message, etc. In principle, crowdsourcing provides more creative ideas than other traditional and previously applied methods. This concept allows organizations to access a rare type of resource, which is creativity of dispersed creators, whose ideas, skills, and remarks have been so far undervalued and unused (Brabham, 2008). The examples analysed in the literature suggest that a large amount of ideas and hidden knowledge allow organizations to discover new patterns and trends that are important from the point of view of a potential recipient (Howe, 2008). The use of crowdsourcing has a positive effect on the efficiency and speed of generating ideas. The combination of the number of participants, creativity and passion, provides many interesting ideas quickly. Consequently, the short time spent on creating new ideas has a significant impact on the business process efficiency.

The use of crowdsourcing however, requires fulfilment of specific conditions (Howe, 2008):

1. Properly defined crowd characteristics. Depending on the resource that is planned to be acquired and the complexity of the ordered task, both the size and the characteristics of the crowd may vary.
2. A precisely described task, which is the basis for the execution of the order by the crowd.
3. Well-chosen tools and technologies for a two-way flow of information.
4. Preparation and selection of a public inquiry form.
5. Preparation of a remuneration system for completed and accepted tasks.

Implementation of crowdsourcing requires from an enterprise to not only prepare proper conditions described above, but also to be more open and go beyond the patterns existing in the organization.

Crowdsourcing is currently being intensively developed in the following areas (Petavy, 2017):

1. Innovation: product, service, experience or business model innovation.
2. Marketing & communications: Brand strategy (naming, identity), communications (positioning, communications platforms, creative development), Activation and promotions.
3. Design: Design (packaging, point of sale, retail).

Research carried out in 2016 showed that the ideas derived from the crowd by means of crowdsourcing were implemented in (Petavy, 2017):

- 59% in the area of innovations,
- 34% in the area of marketing-communication activities,
- 7% in the area of design.

The use of crowdsourcing platforms on advertising service market

Crowdsourcing platforms that are tailored to the purpose of business activity and character of acquired resources are employed in business (Galizia, Garibaldi, 2014). Using crowdsourcing platforms to acquire and offer creative ideas for advertising products is becoming more and more common. Examples of this type of phenomenon are crowdsourcing platforms that have been operating for over a decade, described below as creative agencies.

Crowdsourcing platform is a business model that enables the acquisition of distributed resources from the crowd for a specific purpose and in a specific business area. In case of advertising services, for which creativity is a key resource when using these platforms, special attention should be paid to the following elements.

The type and characteristics of crowd. When talking about creative services offered by crowdsourcing platforms, it is essential to provide the customer with the best ideas for graphic design or advertising text. Making use of a crowd of creative designers allows platforms to deliver a greater number of ideas that are more diverse. This is possible thanks to the applied rule saying that creativity may come from anyone, regardless of education, profession, or geographic location. Such approach creates a society of passionate people who eagerly share their creativity and can create interesting projects. Of great importance is also the fact that projects are created in parallel and that their creators have no contact with each other. This increases the chances of creating many independent, varied proposals for the client.

Well-defined objective. The concept of engaging crowd in action requires a person ordering to precisely define the task. In case of creative services related to creating graphic ideas, it is necessary to develop a proper description of the task.

Specified way to invite the crowd to cooperate. In case of the discussed services, contests constitute a form of a public inquiry. Participation in a contest is voluntary and does not guarantee a gratification. Creators decide themselves if they want to take part in the ordered task based on its description.

Well-chosen technologies. Works implemented on crowdsourcing platforms require properly selected technical solutions. The choice of technology affects communication efficiency and security of transactions.

Legal procedures. Given the character of the conducted services, preparation of legal procedures that facilitate management of intellectual property and acquisition of projects also becomes of particular importance. Crowdsourcing platforms implement the principle of confidentiality using the following solutions:

- contestants sign confidentiality agreements,
- use of market ideas requires signing an agreement on transfer of copyrights.

Remuneration for specific and sold projects. In case of crowdsourcing platforms that offer creative services, an important gratification is payment for the winning project. Remuneration usually falls into the range of 1,000 to €10,000 divided among the best designers (Petavy, 2017). Apart from the financial incentives, the possibility to present one's works created on the platform and outside it to potential buyers is equally important.

The above-mentioned requirements are only the basis for the creation of models of crowdsourcing platforms operating in the creative service sector. Nevertheless, it should be noted that what distinguishes crowdsourcing platforms operating in the described way is the great number of acquired ideas and short time of project completion. Crowdsourcing platforms chosen for exemplification have been designed on the basis of independent rankings.

Table 1. Leading crowdsourcing platforms in the advertising service market

Crowdsourcing platform/ year of creation	Advertising service offer	Number of designers and authors (crowd)	Customer	Number of clients/number of completed projects
https://www.crowdspring.com Year 2008	Logo design, website design, web content	205,000	Service for small companies	40 thousand/53 thousand
https://99designs.com Year 2008	Logo, websites, publishing, packaging, labels, illustrations, clothes	1,500,000	Small and medium-sized companies	444 thousand/500 thousand
http://www.designhill.com Year 2014	Logo, websites, packaging, labels, illustrations, clothes	39,000	Small and medium-sized companies	Several hundred
https://en.eyeka.com Year 2006	Wide range of dedicated solutions	350,000	Big companies	Several hundred/882
https://tongal.com Year 2009	Video content	120,000	Big companies	Unknown

Source: own work based on: www.crowdsspring.com, www.99designs.com, www.designhill.com, www.eyeka.com, www.tongal.com.

Based on the crowdsourcing platforms presented in the above table two different business models can be distinguished. In the first model, implemented by e.g. CrowdSPRING, 99design, Designhill, and Tongal, the crowdsourcing platform manages the entire creative process, from gaining ideas to realizing them. A great advantage of this type of platforms is, first and foremost, creative resources of designers who number around 1.5 million in case of 99design, and several hundred thousand participants in case of the other described platforms. Access to creative potential is possible only from the platform, which, in this case, is an active intermediary between the parties. Similarities between the described platforms from the point of ordering party are presented below:

- scope of offered services,
- degree of legal protection,
- guarantee of satisfaction with the purchased creative projects,
- short order execution time,
- specified price for the offered services-packages,
- communication between the ordering party and the designer takes place only through tools shared on the platform.

Similarities between the functioning of platforms from the perspective of the service provider (the designer) are mainly:

- designers' participation in the project is based on the idea of a competition,
- gratification is determined before the task begins,
- protection of intellectual property is clearly defined and specified,
- portfolios and profiles of designers are available on the platform,
- completed projects are also available on the platform.

The differences in the activities of the analysed platforms are not as prominent as the aforementioned similarities. It is possible to find features that, at a marketing level, distinguish the offer. For example, the crowdsourcing platform CrowdSPRING links the price of the package to the level of security and confidentiality of the obtained and transferred information. Thus, it points out the essence of legal protection of the prepared projects. The largest platform, 99designs, links the price to the number and quality of designers, additionally emphasizing the speed of execution and staying within the determined budget. This is a big advantage when compared to traditional advertising agencies that rarely assure meeting the determined budget at the stage of offer. Another platform, one

that has been operating on the market for the shortest span of time, Designhill, is characterized by great efficiency and low prices. Its packages are mainly limited in regards to the number of designers.

In the case of the first described cooperation model, the buyers, i.e. the representatives of small and medium-size companies, gain access to a vast number of interesting and diverse advertising projects that are executed in a short time. Another advantage of these types of platforms is the guaranteed fixed price of the order execution. The number of accomplished projects with the participation of a multitude of designers enabled the analysed entities to achieve profits significantly higher than local agencies. The prices of services offered by crowdsourcing platforms are usually included in packages with a value between USD 100 and USD 1,000. As to the benefits of the designers, the main advantage is the access to a market of potential buyers located in different regions of the world. Moreover, it is the prepared project proposal and not the designer's competence that goes through assessment. The downside of the aforementioned model is mostly the lack of professional advice at the stage of project selection. The buyers must decide on their own, which, together with the lack of experience and knowledge, may result in a wrong choice.

Another model of cooperation is the so-called community model (Petavy, 2017). An example of use of this model is the crowdsourcing web platform eYecka. Community models:

- allow access to a highly motivated creative community,
- provide the tools and IT technologies to facilitate the flow of information,
- organize and control the course of competitions, and select projects,
- develop financial and legal frames for cooperation.

eYecka platform, unlike the model mentioned before, offers its customers advice and support at various stages of cooperation with creators. Both buyers and creators are moderated by the platform staff in order to achieve the best final results. Inquiries from buyers are discussed in detail and refined before being submitted to execution. Projects submitted by creators undergo internal pre-selection and evaluation by eYecka employees. This platform has a developed system of cooperation, evaluation, and selection of projects submitted by thousands of designers and members of a creative crowd.

Both models of crowdsourcing platforms provide a perfect solution for an effective acquisition of creative ideas. The number of implemented ideas, creators involved, as well as the short project execution time, make these solutions a viable opportunity for the development of the creative service sector.

Conclusion

The concept of crowdsourcing applied in the creative service sector provides an unprecedented access to creativity dispersed in a crowd. Creativity, as the core of the advertising service, has been freed from the organizational constraints of a company and has become its authentic resource. Utilizing this potential becomes not only a great opportunity, but also a challenge for the advertising agencies as entities in the creative service market. Regardless of size and location, advertising agencies can use crowdsourcing to provide their customers with new, creative ideas for advertising actions in a shorter time and at a lower cost. This kind of approach facilitates access to high quality advertising products for a bigger group of small and medium-size companies as buyers, which has a positive impact on new operating conditions of entities. The creators themselves have become more important, as their work, until recently merely a hobby or additional activity, has become a valuable resource.

Advertising agencies that use crowdsourcing may apply different models of action. In business practice, both the integrated model, such as crowdsourcing platforms that offer a standardized offer for creative services, and

the hybrid model, exemplified by community platforms, are applicable and effective. The hybrid model can be an incentive to move beyond the rigid framework of division between local and global agencies for entities operating so far in the traditional way in the advertising market. Hybrid agencies combine the strategic knowledge of their employees with the external resources of creative communities. In this arrangement, the employees of the agency remain in their role of the designers' work coordinators. The only difference is that they have access to unlimited creative ideas resources, which highly increases the chance to meet the needs of demanding customers.

In the context above, crowdsourcing becomes a solution to overcome the existing limitations in the creative service sector. This particularly applies to improvement of quality in case of creation of unique ideas. As indicated by the conducted research, this is the most desired feature of any good advertising service.

References

Brabham, D.C. (2008). Crowdsourcing as a Model for problem solving. *The International Jurnal of Research into New Media Technologis*, *1* (14), 75–90.

Galizia, T., Garibaldi, C. (2014). *Tech trends 2014. Inspiring disruption*. Deloitte University Press.

Howe, J. (2006). The rise of Crowdsourcing. *Wired Magazine*, *6* (14), 1–5.

Howe, J. (2008). *Crowdsourcing*. New York: Crown Publishing Group.

Kazai, G. (2011). In search of quality in crowdsourcing for search engine evaluation. *Computer Science*, *11* (66), 165–176.

Poetz, M.K., Schreier, M. (2012). The value of crowdsourcing: Can user relly compete with professionals in generating new product ideas? *Jurnal of Product Innovation Management*, *29*, 245–256.

Petavy, F. (2017). *The age of ideation*. Crowdsourcing report 2017 – eYeka, 3–36.

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ACTIONS OF SOCIAL RESPONSIBILITY IN CREATING THE BRAND IMAGE OF A SERVICE ORGANIZATION

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Abstract

The article aims at responding to the following research question: do the undertakings in the area of corporate social responsibility (CSR) play a role in enhancing the desired image features of the analysed service provider's brand, and if yes, what does this role consist in ? The decision to focus the attention on this particular subject has been motivated by the significance of corporate responsibility of today's service organizations, and the awareness that in their decision processes people are guided by the service provider's brand image. It is important therefore to increase understanding of methodological activities undertaken by a service organization in pursuit of its desired brand image, and of possibilities to attain this goal by means of CSR undertakings. The methodology of conducted research spanned the diagnosis of the actual state of knowledge in the analysed area, review of available results of research, own research using the case study method, and meta-analysis of the Internet sources of information on the Orange CSR activities.

The analysed operator is socially responsible and has a well-considered strategy in this area. Methodical Orange CSR actions form a clear support for the creation of a strong socially responsible brand and enhances its positive image. In current market conditions the effective creating of brand image of a service organization seems to be determined by appropriate activities in the field of corporate social responsibility. The obtained results might be used to develop knowledge in the field of brand management of a service organization or by involved stakeholders from the service sector.

Introduction

The effectiveness of operation of today's service organizations largely depends on: orientation towards shareholders, activities targeted at protection and enhancement of social standards, economic and legal responsibility, ethical conduct, respecting social obligations of the market players, but also on the personified brand management, including its appropriate image. Consequently, the obligations of the today's service organization,

apart from its core activities, seem to comprise among others: protection of the planet, defence of human rights, care for natural resources, engagement in matters of importance to the stakeholders, and provision of positive experience related with the brand, which the stakeholders desire to get involved with.

In many sources of information authors are concerned about the impact of CRS on brand and customer relationships (Liu, Wong, Shi, Chu, Brock, 2014; Kuo-Fang, Yan, Kuang-Wei, 2014; Khojastehpour, Johns, 2014; Moon, Lee, Oh, 2015; Fatma, Rahman, Khan, 2015; Wolf, Issa, Thiel, 2014; Pogorzelski, 2015; Wang, Korschun, 2015). However, studies on the impact on brand image have not been met. The identified research gap led to aims at presenting the role of actions of corporate social responsibility (CSR) in shaping the appropriate brand image of a service organization.

A service organization faces a challenge of application of proper tools, means and procedures, including the socially responsible initiatives, by which the individual is the most important subject and beneficiary of the created benefits, including the ones resulting from it appropriate image.

Actions of CSR of a service organization and its brand image – literature review

The term – action of corporate social responsibility – is generally applied to a variety of activities in the area of corporate social responsibility. It is related to an effective management of a service organization, which by responding to identifiable expectations of stakeholders contributes to enhanced competitiveness, ensures stability and sustainable development, and at the same time facilitates economic and social development while creating both the social and economic value (Rosenbaum-Elliott, Percy, Pervan, 2011; Khojastehpour, Johns, 2014).

CSR forms a background for designing and including the projects which incorporate the goals and values pursued by the society in the strategy of operation of a service organization (Johann, 2015, pp. 19–30). Responsible business means a strategy which involves social, ethical and environmental aspects into business operations and contacts with stakeholders, i.e. the employees, clients, shareholders, local community, media representatives and other subjects.

No commonly agreed set of CSR instruments can be observed in the available sources of information. According to the Responsible Business Forum, business practice shows a multitude of CSR practices, which can be divided into the following categories: business and the market, business and workplace, and business and the society. Activities for the benefit of the society comprise: charity, employee volunteering and social investments; for the benefit of the environment: corporate environmental policy, environmental audit, employee involvement, green manufacturing, and green products (Fatma et al., 2015).

The types of social activities, so called CSR actions, comprise: a social agenda, a social action, and a social campaign (Rasche, Morsing, Moon, 2017). Social agenda means a planned and long-term activity aimed at responding to a specific problem, frequently implemented with the support of public institutions, business representatives and social organizations; a good idea which can attract attention of the society is of primary importance, such as the "the whole of Poland reads for children". Social action is a one off or cyclical, usually short-term endeavour – for example a money collection for a specific purpose, such as The Great Orchestra of Christmas Charity. Finally, the social campaign is a series of targeted actions designed to change the behaviour, and even the attitude of a specific group of people. It is a large endeavour which involves a large number of entities: business, media, social organisations, state institutions. Involvement takes various forms: financial, service-oriented, physical, educational. Summing up, service organizations may use various CSR tools, it is important however to adopt a well-considered approach.

Organizations interested in professional involvement in matters of social importance should design a special programme or a strategy in this. The following procedure for getting involved in socially important matters seems to be logical: 1) analysis of the mission statement and deciding if the pro-social activities may be related to it; 2) identification of the areas which will be supported (protection of health, environment, education, culture, etc.); 3) choice of subjects to be supported (children suffering from cancer, persons with disabilities, women constituting potential clients, or other populations); 4) specifying the expected benefits (strengthening employee loyalty, creating a positive image, support for local community, etc.); 5) defining the forms of engagement (financial, educational, in-kind, service-oriented); 6) choice of tools (agenda, campaign, action, other); 7) deciding if this is a one-off endeavour or a long-term process; 8) preparing the schedule of implementation; 9) specifying persons responsible; 10) launch of activities; 11) planned methods of assessment (measuring) of the achieved results. The stages indicated above should allow for optimisation of the activities and results in the analysed area.

A brand image of a service organization is a set of characteristics or a list of features ascribed to it (Keller, 2013, p. 76, 549; Rasche et al., 2017, p. 92; Tarczydło, 2013).

Razmus (2010, pp. 10–11) describes three views of understanding of brand image: psychological (individual impression), sociological (collective impression) and anthropological (cultural element). The author states that brand image is a hypothetical construct whose aim is to create loyalty to a brand.

And what's more, supporters of the significance of the brand image claim/promise that a tenderer who decides to create the most distinctly outlined brand image will gain the biggest part of a market and the biggest profits.

Stakeholders, including customers, can be attached to the image of a service organization because of their beliefs concerning psychological and social aspects ascribed to it. It results from the fact that associations with a brand may carry a crucial meaning for a self-image of an interested party (Franzen, Moriarty, 2015, p. 114; Rosenbaum-Elliott et al., 2016, pp. 92–93).

Thus, it seems legitimate to state that in current market conditions service organizations should take particular care of the right brand image which appears to be an important tool of market competition and a factor generating value for stakeholders.

A method and the object of research

For the purposes of this study, the analysis was focused on the telecommunications services operator Orange in the period of February to July 2017. The performed case study was directed at finding the answers to the following questions: 1) does the analysed service organization constitute a socially responsible organization and pursues a well-designed strategy of CSR actions; 2) did Orange implement any CSR undertakings in the analysed period and what was their nature; 3) were the undertakings new or did they form a part of long-term projects; 2) what is the role of socially responsible activities in the creation by the operator of the brand image; 3) what is the impact of the identified CSR actions on the image features of the analysed service brand. The description of the market object is presented in Table 1.

Table 1 summarises the object of research, the brand which marks the services and the characteristic features of the marketing communication developed for it, and outlines the CSR policy of the analysed operator.

Table 1. Selected features of the analysed operator, its brand, and the CSR policy

Criteria	Description of criteria
General information	Orange Polska is a telecommunications, multimedia and entertainment services provider which uses modern technologies. It is a leader in the Polish fixed telephony, Internet and data transmission market; it offers comprehensive telecom solutions.
The brand and main values	Orange is an international brand for telecommunications services owned by France Télécom and managed by Orange Brand Services Ltd. Orange brand determines the values and the way of operation which should be followed by the whole organization. Its aim is to be the most willingly chosen telecommunications brand. The purpose is to democratise the digital revolution. Services provided by the operator should be easy to understand, simple, and user-friendly. The values which guide Orange pursuant to its Code of Ethics are the following: direct, honest and inspiring, friendly and dynamic.
Features of the communication for the brand	Marketing communication for the Orange telecom services brand is based on creativity, stirring emotions, creating positive experience, engaging stakeholders, making life easier, and providing entertainment. It is the widely understood communication which is stressed, and not the technical specifications of the service and product packages. On 10 February 2017, a campaign was launched promoting the new Orange Love service (it includes Internet access, 4K TV, and unlimited calls in one package for less than 3 PLN per day). The Beatles "All You Need Is Love" song has been used in an advertising spot. The creation of the new advertising campaign for the Orange Love service has been entrusted to Publicis agency.
CSR policy	By means of the CSR undertakings the brand engages itself in socially important matters and consequently it starts to play an important role in the stakeholders' life. The Orange CSR policy constitutes a set of decisions, actions and undertakings in various areas of responsibility vis a vis its employees, clients, partners, communities, media, Internet users, and other stakeholders. Overall, the Orange brand marks clever and courteous CSR actions which allow for attainment of a variety of objectives and generate a range of benefits.

Source: own elaboration on the basis of conducted research.

While presenting the problem of creation of an appropriate image for the Orange brand it is worth making a reference to connotations with the etymology of the name linked to the orange colour and its influence on the recipients. The colour of the brand is formed by a mixture of red and yellow, it signifies joy, optimism, energy, fun and warmth, and creates connotations with physical comfort, good communication between people and abundance.

The role of CSR in creating the proper brand image – results of case study

In order to face the challenge of investigating the opportunities for creation of an appropriate image of the Orange brand involving the CSR actions, a case study was conducted; the results are presented in Table 2.

Information presented in Table 2 confirms the thesis that the CSR activities play an important role in the process of creation of the appropriate image for the Orange brand. The conducted research shows that the analysed brand has regularly participated in numerous pro-social projects for a number of years. Most probably the engagement in the issues important for the stakeholders and general contribution to doing good constitute its main goal. At the same time, the observed undertakings attract the attention of many partners, clients and journalists, resulting in a publicity effect and facilitating positive connotations with the Orange brand.

The assessment of the identified CSR actions pursued by Orange lead to the conclusion that they contribute to the long-term process of development of its market value. The most important results of the methodical CSR actions are quantifiable benefits for the analysed service organization and its environment, such as: motivation for personnel, support for the projects which are important for the stakeholders, enhancement of social standards, protection of the environment, education, creation of positive experience, and provision of entertainment.

Table 2. Enhancement of the Orange brand image involving the CSR undertakings

Areas of Orange CSR activities	Examples of projects/undertakings and their description	Enhanced features of the Orange brand image
Interesting team	Orange pays particular attention to providing to its employees equal treatment, clear criteria of evaluation and promotion, opportunity for professional and personal development, good and safe working conditions. The company raises employee awareness of values, ethics, and social responsibility: CSR Day in Orange Polska; Volunteering Week in Orange "Share your Smile"; employee volunteering initiatives, e.g. we play for The Great Orchestra of Christmas Charity, a phone call to Mum, etc.	Valuable employees
Safe net	Security and safety in Internet and other electronic media and preparation for informed use of them; security for children in the net, e.g. Helpline.org.pl – 800,100,100 (special free-of-charge emergency number and website for children in dangerous situations encountered on the Internet); educational internet services, such as www.sieciaki.pl; e-learning courses and educational materials; guides for parents "Safe media"	Responsible provider of comprehensive telecommunications solutions; showing care for the most vulnerable
Digital integration	Countering the digital exclusion, Orange actively gets involved in development of internet network supported by EU funds, e.g. in the Lubuskie and Pomorskie Voivodships; cooperation with the Widzialni Foundation in the area of accessibility of the Foundation's website to internet users with disabilities; encouraging the elderly to use new technologies, among other through educational materials, training courses, on-line interviews "Meetings with passions"; multimedia Orange workshops	Friendly (comprehensible, simple), close, inspiring, accessible
Clean environment	Striving to reduce the environmental impact, such as "Green IT" project, which covers global eco-effective approach to the development and use of the IT environment, e.g. digitalisation of resources, energy consumption, printing methods; "E-schools" educational programmes; promotion of e-document solutions, tele- and video-conferences; www.orangerecykling.pl	Pro-environmental
Health, sport, active life	Orange sports clubs; running events under the auspices of the brand; cooperation with schools in the area of education for healthy living	Stimulating active lifestyle
Fun, quality entertainment, positive expe-rience related with the brand	Orange Warsaw Festival; a variety of events engaging the stakeholders	Providing entertainment, close, dynamic, creative
Reporting of achievements	CSR reports developed with reference to key opportunities and challenges of sustainable development in ICT industry, defined on the basis of strategic documents, i.e.: Vision 2050 – World Business Council for Sustainable Development, Challenges for the ICT sector according to SAM, Global e-Sustainability Initiative Report, Europe 2020 and Poland 2030 reports	Well-known, most readily chosen international operator, reliable, transparent

Source: own elaboration on the basis of conducted research and with the use of Internet resources.

Conclusions

This study has been focused on the subject of corporate social responsibility of a service organization, its form, pertinence, and relevance of the activities for creation of an appropriate image of the service brand.

Today's service organizations are accused not only of polluting the environment, but also of social effects, such as loss of jobs, feeling of insecurity, or social disparities. They are expected not only to provide high quality services, but also to participate in solving a variety of issues of concern for the stakeholders. The implemented CSR undertakings of the brand may generate a variety of benefits: employee involvement in supporting the ones in need; personal and professional development of the persons involved; strengthening the relation with the community, protection of the environment; taking care for health; provision of social aid; rising awareness; promotion of culture; and additionally – efficient creation of an appropriate image.

The analysed operator is socially responsible and has a well-considered strategy in this area. It duly performs its integrated reporting obligations, hence the volume of available information on the range of the pursued CSR

undertakings. Observed actions are long-term projects, which provide framework for subsequent campaigns and actions. It is important to grasp the opportunities and perform the activities which are inspired by the signals from the market. This is also inspired by the client-oriented business strategy implemented since April 2015 based on consumer insights, entitled "What is important to you, counts" (Kubicka, 2017, pp. 33–40; Keller, 2013, p. 335). In the light of representative research, the key areas of client's life in which Orange can support them by providing the solutions which are best for them are: the loved ones, home, mobility, entertainment, money, technology, and business.

Methodical Orange CSR actions form a clear support for the creation of a strong socially responsible brand and its recognizable and positive image, they attract talented individuals and strengthen employee motivation, facilitate implementation of an innovative strategy which follows the principles of sustainable development, and contribute to increasing the profits and a range of various social and community benefits. In the light of the available information, as at 6 June 2017 Orange is one of 48 companies and the only telecom services provider in Poland who joined the Partnerships for Sustainable Development conceived by the United Nations. They are targeting the challenges faced by today's world, including poverty, inequalities, climate change, and strive towards the economic, social and environmental balance.

In the light of the performed analysis and research, the following thesis proves to be justified: at the time of sustainable development (of which the core objects seem to be the people, the planet, and the profit) the effective creation of the brand image is determined by an appropriate CSR strategy. This is due to the fact that the CSR undertakings of the brand constitute today an apparently effective tool for influencing the stakeholders' behaviour, generating value, stimulating sales, and creating results of relevance for the image.

Summing up, a socially responsible service organization should be honest, competent and sound in the performance of its obligations, it should be motivated by both its own interests and the ones of the society; it should temper the desire for immoral and unbridled profit and wastefulness, it should think and act with the long-term perspective in mind for the benefit of the society and the environment, in line with the concept of sustainable development.

References

Fatma, M., Rahman, Z., Khan, I. (2015). Building company reputation and brand equity through CSR: the mediating role of trust. *International Journal of Bank Marketing*, *6* (33), 840–856. DOI: 10.1108/IJBM-11-2014-0166.

Franzen, G., Moriarty, S.E. (2015). *The science and art of branding*. New York: Routledge.

Johann, M. (2015). *Service marketing*. Warsaw: Warsaw School of Economics.

Keller, K.L. (2013). *Strategic brand management. Building, measuring and managing brand equity.* (4th ed.). New York: Pearson Education Limited.

Khojastehpour, M., Johns, R. (2014). The effect of environmental CSR issues on corporate/brand reputation and corporate profitability. *European Business Review*, *4* (26), 330–339. DOI: 10.1108/EBR-03-2014-0029.

Kubicka, A.M. (2017). Rola consumer insight w zarządzaniu relacjami z klientem – studium przypadku. *Marketing w Praktyce*, *3*, 33–40.

Kuo-Fang P., Yan C., Kuang-Wei, W. (2014). *Brand relationship, consumption values and branded app adoption*. Industrial Management & Data Systems, *8* (114), 1131–1143.

Liu, M.T., Wong, I.A., Shi, G., Chu, R., Brock, J.L. (2014). The impact of corporate social responsibility (CSR) performance and perceived brand quality on customer-based brand preference. *Journal of Services Marketing*, *3* (28), 181–194. DOI: 10.1108/JSM-09-2012-0171.

Moon, B.J., Lee, L.W., Oh, C.H. (2015). The impact of CSR on consumer-corporate connection and brand loyalty. A cross cultural investigation. *International Marketing Review*, *5* (32), 518–539. DOI: 10.1108/IMR-03-2014-0089.

Pogorzelski, J. (2015). *Marka na cztery sposoby. Branding percepcyjny, emocjonalny, społeczny i kulturowy*. Warszawa: Wolters Kluwer.

Rasche, A., Morsing, M., Moon J. (2017). *Corporate Social Responsibility. Strategy, communication, governance*. Cambridge: Cambridge University Press.

Razmus, W. (2010). Metody pomiaru wizerunku marki. *Marketing i Rynek*, *6*, 10–15.

Rosenbaum-Elliott, R., Percy, L., Pervan, S. (2011). *Strategic brand management*. (2nd ed.). Oxford University Press.

Tarczydło, B. (2013). *Metodyka kształtowania wizerunku marki*. Rozprawy. Monografie nr 298. Kraków: Wydawnictwa AGH.

Wan, L.C., Poon, P.S., Yu, C. (2016). Consumer reactions to corporate social responsibility brands: the role of face concern. *Journal of Consumer Marketing*, *1* (33), 52–60. DOI: 10.1108/JCM-03-2013-0493.

Wang, W., Korschun, D. (2015). Spillover of social responsibility associations in a brand portfolio. *Journal of Product & Brand Management*, *6* (24), 596–609. DOI: 10.1108/JPBM-06-2014-0629.

Wolf, R., Issa, T., Thiel, M. (2014). Empowering organizations through corporate social responsibility. Hersey: IGI Global.

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THE QUALITY OF THE AIRPORT'S PRODUCT

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Abstract

The air transport market is followed by the development of competitive processes. One of the instruments of competition is broadly understood as aviation service. Most often it is defined as a typical transport service. However, due to the specific nature of the branch, it is necessary to indicate the services that accompany the transport service, including airport services. They are carried out by airports and all parties cooperating with the airport.

Airports, increasing the catchment area, increasing the network of air connections, must manage the quality policy. The quality policy should be analyzed by the airports at the level of: passenger satisfaction, customer retention, passenger loyalty, and loss of customers.

The main purpose of the article is to assess the quality of services offered by airports in Poland. In accomplishing such a goal, the work structure was defined.

In the first part, quality issues in air transport were analyzed, then airport services were determined, and then in the last part, based on author's research, opinions of passengers using Polish airports on airport quality were presented.

Introduction

The air transport market is followed by the development of competitive processes. One of the instruments of competition is broadly understood aviation service (Tłoczyński, 2016, pp. 123–172). Most often it is defined as a typical transport service. However, due to the specific nature of the branch, it is necessary to indicate the services

that accompany the transport service, including airport services. They are carried out by airports and all parties cooperating with the airport.

Airports, increasing the catechment area, increasing the network of air connections, must manage the quality policy. The quality policy should be analyzed by the airports at the level of: passenger satisfaction, customer retention, passenger loyalty, and loss of customers. And then analyzed in each area of activities related to the operation of air transport.

Quality in air transport

There is a varied approach to quality in world literature. It can be defined in a number of different ways, such as utility, conformance, or lack of standard deviation (Quality: the UD..., 1982, pp. 68–80; Quality Programs..., 1992, p. 81), but most often the literature provides the definition of the American Society for Quality. This is a subjective term in which quality is defined as the totality of characteristics and characteristics of a service that determine its ability to meet actual or implied needs. (A subjective term for which each person or sector has its own definition. In technical usage, quality can have two meanings: the characteristics of a product or service that bear on its ability to satisfy stated or implied needs and the product or service free of deficiencies. According to Joseph Juran, quality means "fitness for use;" according to Philip Crosby, it means "conformance to requirements.") (Basic Concepts).

This definition focuses on the client. The manufacturer takes care of the quality when the service fully meets the needs of the purchaser or when the service quality exceeds the buyers expectations. The enterprise creates quality when the good or service satisfies the needs and requirements and expectations.

Total Quality Management (TQM) is implemented in all areas of the economy, regardless of the areas of activity. With regard to air transport the company delineates the quality of the operation from the quality of service adjustment to the needs of the purchaser. Quality-related activities relate to the level at which the air service performs its functions. Examples air transport services offered to passengers by traditional and low cost carriers. On the other hand, the quality of service customization means no faults and constant delivery of a specific level of service.

The quality of passenger service should be defined as an element defining standards from one part, on the other – passenger expectations, as well as the requirements of operators handling air transport. Customer service includes all activities related to the implementation of the air service and additional activities accompanying this service, as well as actions aimed at repairing errors committed at any stage of the order execution. The passenger handling process in passenger air transport consists of four aspects.

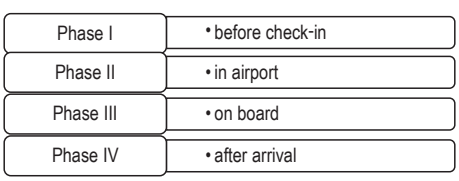

Figure 1. Handling in airport

Sources: my research.

The natural character of air transport services is diverse. However, due to the specific nature of air transport and its features, that the need to offer high quality service is highlighted, especially since operators are well known and have a good position in the market. Air transport companies provide:

- appropriate selection and improvement of staff qualifications (good health, ability to deal with unusual situations, language skills, etc),
- specification of any services associated with the primary service – transport, specific services offered by traditional, low cost carriers or a particular class of travel,
- passenger satisfaction analyzes (carrying out systematic surveys, guest reviews, use of suggestions and complaints to improve service imperfections).

In many air transport companies, quality managers perceive it through own assessment criteria rather than from the perspective of the air carrier. Therefore, any customer service initiatives should be closely linked to quality improvement programs.

In the process of managing the quality of passenger service, there are three segments that define the competencies:

a) managing airlines:
   - traditional requirements analysis and quality control measurement,
   - internal analysis of employees' views on quality and performance,
   - the management's view on the quality of service,
   - internal marketing of quality specifications and expected performance,
   - marketing activities;

b) employees:
   - employee view of service quality,
   - ability and willingness to perform tasks in accordance with high quality,
   - interpretation of expected quality,
   - demand analysis and quality control,
   - manufacture and sale of air services;

c) travelers:
   - market quality evaluation of services (expected quality, experienced quality, perceived quality) (Stryś, 2003, p. 30).

The presented systemic approach to the quality of services in air transport makes it easier and more efficient to manage companies operating on the air transport market and to provide services in line with buyers' expectations.

Airport poroduct

Quality is one of the major tools for positioning aviation. One of the features of aviation service is high quality, that is to provide customers with reliable, safe, reliable, high-travel and additional services.

In the marketing concept service is understood as an intangible product. Such a broad definition stems from the fact that the term "product" in marketing is everything that gives the consumer or buyer specific benefits. This means that consumers do not buy goods or services, but only make payments for selected benefits and value from the entire supply of benefits offered (Payne, 1994, p. 159).

An aviation service should be seen through its:

- external (formal) functions,
- basic usable value (Rucińska, Ruciński, Wyszomirski, 2004, p. 161),
- total usability, ie, a service enriched by the inclusion of additional services in the primary transport service (Rucińska, Ruciński, Tłoczyński, 2012, pp. 202–203).

Airlines are increasingly offering service packages (Głowacki, Kossut, Kramer, 1984, pp. 55–56):

- a network of convenient connections,
- timetable and coordinated timetables and departures in various relationships,
- type of aircraft operated,
- accessibility to the varying levels of quality of travel conditions,
- comprehensive and efficient service of airport service recipients (Czownicki, Kaliński, Marciszewska, 1992, pp. 48–49).
- catering on board aircraft,
- ensuring adequate leisure onboard aircraft (long-haul routes) and at airports (children's play areas),
- sale in duty-free shops, on board aircraft,
- possibility to carry luggage,
- bilateral agreements, alliances,
- other facilities (Wensveen, 2007, pp. 263–266).

The features of the aviation service should be synchronized with the objectives and production capacities of carriers, airports, market conditions of their macro and microcosm. There are two main market segments for the aviation service:

- carriage services performed by air carriers,
- services supporting the transport service performed at airports.

The airport product consists of a supply of services, both tangible and intangible, to meet the needs of different market segments. Marketing theory often divides the product into the core, actual or physical, and augmented elements. The core product is the essential benefit that the consumer is seeking, while the actual product delivers the benfits. Product features, quality level, brand name, design, and packaging make up the physical product. The augmented product is the additional consumer services and benefits that will distinguish the product from others (Kotler, Amstrong, 2006, pp. 243–244).

The airport product has tangible elements such as the physical infrastructure and intangible elements such as the provision of services. B. Urfer and R. Weinert classify the tangible features as the airside infrastructure, landside infrastructure, airport support infrastructure and support areas such as industrial areas and duty free zones. The intangible components are defined as the organisational, structural and operational aspects such as state support administration, operations, airport maintenance and external factors such as regulations and the environment (Urfer, Weinert, 2011).

It's common to differentiate between business-to-consumer (B2C) products purchased to satisfy personal and family needs, and industrial or business-to-business (B2B) products bought yo use in a company's operations or to make other products (Dibb, Simkin, Pride, Ferrell, 2005). The airport industry has both types of product (Figures 2 and 3). For instance, it offers a B2B product to airlines and B2C product to its passengers. For the airline, the core is the ability to land and take off a plane, while for passenger it will be the ability to board or disembark an plane.

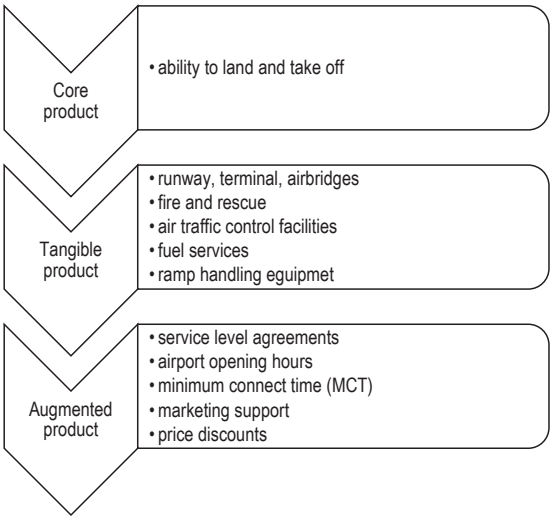

Figure 2. The airport product for airlines

Source: Halpern, Graham (2013), p. 118.

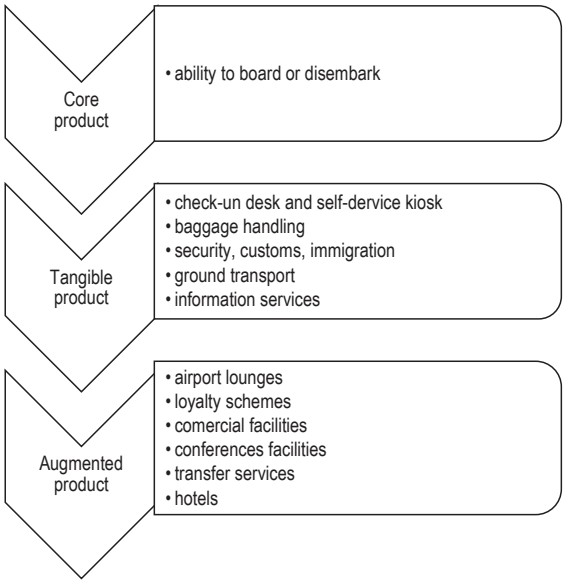

Figure 3. The airport product for passengers

Source: Halpern, Graham (2013), p. 118.

For each customer there will be a core product: for instance, for freight forwarders it will be the ability to load and unload freight on the aircraft. In order to provide the core product for airline, the actual product consist of the runway, the terminal building, the equipment, and so on, as well as the expertise to provide all these facilities efficiently and safely. For passenger, the actual product include check-in, luggage and other facilities, and immigration control, security, gate. The actual product will also include adequate transport services to/from airport and airport bridge, information desk and toilets.

At the augmented level the airport may, set service level agreements with its airlines to speed up processes or open for longer hours to improve accessibility. For passenger, the range and diversity of shops, catering and other commercial facilities, and loyalty programs (Halpern, Graham, 2013, pp. 117–119).

There are many factors that affect the choice of an airport. Between the enterprites comes competition. By competing with other airports, they want to attract new carriers, get the right seats in apron, and have a base for airline operators. The competitive position of airports is largely dependent on the economic potential of the region.

Airports are characterized by very similar developmental conditions. In handling the needs of the international market, the airports towards oneself are highly competitive. Competition between airports should be analyzed on two levels.

Table 1. Tools for analysis of competition between airports

From the point of view of air carriers	From the point of view of passengers
– catchment area, – potential demand, – slots – time slots for performing flight operations, – network of air connections, – competition between handling agents, fuel agents, etc., – port charges, – quality of handling (passenger and ground), – the possibility of receiving public aid, subsidies, – basing aircraft carriers, – presence of major aviation competitors and their grid connections, – guaranteed operating time of air carriers, – aviation and non-aviation infrastructure and access to it, – possibility of further development of the port	– destination airports, – frequency and flexibility of the offered connections, – possibility of transfer to other airports, – air transport links efficiency, – duty free area, – costs of transportation to and from the airport, – terminal functionality

Source: Kaliński (1998), p. 42 and Vogel (2001), p. 7.

Ultimately most decisions concerning the choice of airport will be based primarilly on the air services available at the airport and the proximity of the airport to the potential consumer. It is very important for the airport to remember this and to focus its marketing on the air services on offer and the airport's convenience rather than giving every fact about the facilites on offer. Similarly, when marketing to airlines, it is information about the nature of catchment area and potential demand rather than small details about the airport infrastructure that will most probably sell the airport. No amount of money spent on improving facilities will attract airlines to the airport inless they consider that there is a market for their services.

Quality research airport product

Quality of service results from the ability of airlines to meet customer expectations or even to exceed them. The measure of this capacity is the actual quality of the air transport service assessed from the point of view of:

- technical quality of passenger handling,
- functional quality of passenger service (Hooley, Saunders, Piercy, 1998, p. 147).

Passenger in relation to the quality of services is expecte:

- achieve the benefits,
- implementation of the acquired service on the offered high level of services rendered,
- save time and quickly resolve the problem of acquiring services,
- individual and efficient handling while ensuring a buyer's sense of uniqueness,
- loyalty, confidentiality, honesty and integrity,
- competence and empathy of distribution staff (Rosa, 2006, p. 142).

Two dimensions of service quality represent the subjective character of quality assessment. The most commonly used criteria for assessing the quality of services in air transport include:

- rolling stock operated by the carriers – quality, number of seats in each class in the aircraft, spacing between seats, offered catering,
- capacity of the terminal, quantity, quality and location of service points, number of check-in counters, checks, number of gates, technical and technological solutions (moving stairs, moving platforms, sleeves, bus or passenger train),
- reliability – assurance that the service will be carried out in accordance with standards and time,
- professionalism and qualifications – having the relevant knowledge, experience and skills needed to solve a variety of problems,
- sensitivity – willingness to offer passengers the necessary help,
- attitude and behavior – passengers must be aware that carrier personnel, handling agents will be interested and friendly, polite in solving problems, and showing willingness to know the needs of passengers,
- availability – free hotline, website, directions to the airport, possibility to buy air tickets at the airport, check-in at the city,
- reputation and credibility – the image of the air carrier, trust, honesty,
- security – not to expose customers to danger, airport control systems and procedures, safety to air transport and onboard aircraft,
- communicability – maintaining contacts with customers by sending understandable messages to them and listening to them,
- speed of response air carrier, and handling agent (Payne, 1994, p. 268; Gronross, 2007, p. 47).

In 2013, thirteen airports operating at that time researched marketing to passengers' evaluation of the implemented instruments of competition. The survey evaluated 2.4 thousand passengers, (0.1% of traffic in each of the analyzed airports). In order to conduct the study, the sample was stratified on the basis of the number of passengers and the specificity of traffic in each airport. Adoption of such division was necessary due to the inability to obtain complete information from all airports on the air traffic structure, age, occupied position and destination of passengers and other key criteria. One in every 18–80 year old passenger was surveyed in each port surveyed at

the time of the safety audit. The study was not carried out only at Modlin Airport, because during the study period the Modlin Airport didn't operate.

In primary studies, the top scores were obtained by the flight scheduling system – 86% of the passengers surveyed and the directional information system (visual and voice) – 80% of the respondents. The most objectionable passengers had to trade services – 25% of respondents and gastronomic – 24% of respondents (Figure 4).

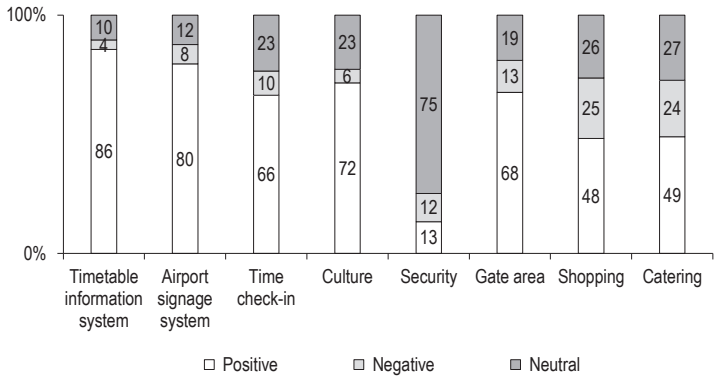

Figure 4. Evaluation of quality airport product in Poland

Source: my research in Polish airports.

The way to get to the airport is closely related to the nature of travel and social status. In Europe, passengers using low cost and charter carriers and traveling by air of traditional carriers in economy class, usually use public transport services for airport transport. In Poland only every 10 passengers use public transport services.

Passengers most often assessed the travel time to the airport as good (Figures 5 and 6).

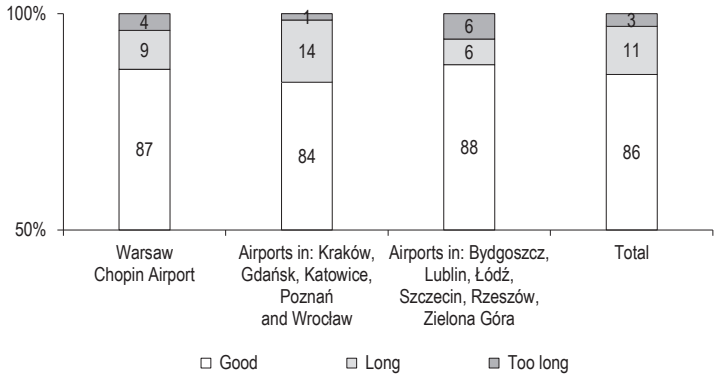

Figure 5. The opinion of passengers traveling business about airport links in Poland

Source: my research in Polish airports.

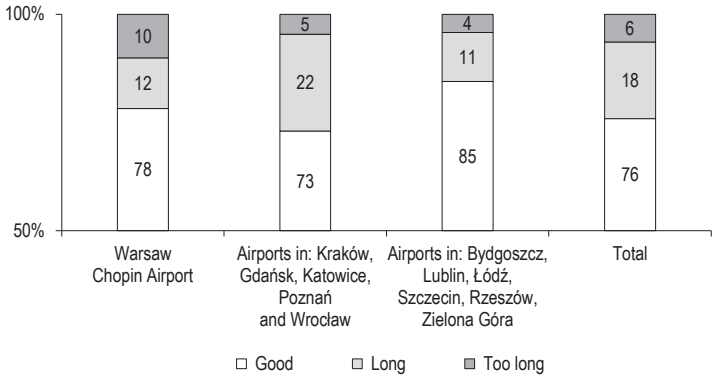

Figure 6. The opinion of passengers traveling non-business about airport links in Poland

Source: my research in Polish airports.

The respondents highly valued the competence and quality of handling agents. 55% of respondents were very satisfied, 33% were rather satisfied, 9% were travelers who had a neutral attitude to handling and 2% were dissatisfied. The respondents who were not satisfied with the service at airports were only 1% of travelers.

Summary

Airports need to understand and manage quality policies. Major areas of airport product quality include:

- service contact – the passenger is in contact with the staff of the airport operators and with the terminal infrastructure,
- service structure – core product, tangible product and augmented product,
- organization and culture of service – efficiency and quality of infrastructure and staff involvement in the handling of passengers,
- the connection between the airframe and the quality of service provided to carriers and passengers at airports.

Based on the research conducted, the following conclusions were drawn:

- airport product quality is assessed by passengers and carriers. Both the first and second groups evaluate the quality airport product in the functional and technical area,
- The highest scores were obtained in airport surveys: 86% of passengers surveyed and 80% of respondents (visual and voice guidance). The most objectionable passengers had to trade services – 25% of respondents and gastronomic – 24% of respondents,
- Passengers most often assessed the travel time to the airport as good,
- respondents rated the competence and quality of handling agents very highly; 55% of respondents were very satisfied,
- marketing research must be conducted systematically and in accordance with internally accepted rules.

References

Basic Concepts, ASQ. Availabe at: www. asq.org.

Czownicki, J., Kaliński, D., Marciszewska, E. (1992). Ekonomika transportu lotniczego. Warszawa: Szkoła Główna Handlowa.

Dibb, S., Simkin, L., Pride, W., Ferrell, O. (2005). Marketing: Conceps and Strategies. Boston: Houghton Mifflin.

Głowacki, R., Kossut, Z., Kramer, T. (1984). Marketing. Warszawa: PWN.

Graham, A. (2008). Managing airports. An international perspective. Butterworth-Heinemann.

Gronross, Ch. (2007). *Service Management and Marketing: Customer Management in Service Competition*. Wiley India Pvt. Limited.

Halpern, N., Graham, A. (2013). *Airport Marketing*. London–New York: Routledge.

Hooley, G.J., Saunders, J.A., Piercy, N.F. (1998). *Marketing Strategy & Competitive Positioning*. Harlow: Prentice Hall.

Kaliński, D. (1998). Uwarunkowania polsko-niemieckich powiązań w zakresie infrastruktury transportu lotniczego. In: H. Brdulak (ed.), *Konkurencyjność transportu – wybrane zagadnienia*. Warszawa: Szkoła Główna Handlowa.

Kotler, Ph., Amstrong, G. (2006). *Principles of marketing*. Pearson Prentice Hall.

Stryś, A. (ed.) (2003). *Marketing usług*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Payne, A. (1994). *The Essence of Services Marketing*. London: Prentice Hall.

Quality Programs Show Shoddy Results (1992). *Wall Street Journal*, 14 May.

Quality: the UD Drives to Catch Up (1982). *Business Week*, *11*.

Rosa, G. (2006). *Usługi transportowe. Rynek konkurencja marketing*. Szczecin: Uniwersytet Szczeciński.

Rucińska, D., Ruciński, A., Tłoczyński, D. (2012). *Transport lotniczy. Ekonomika i organizacja*. Gdańsk: Uniwersytet Gdański.

Rucińska, D., Ruciński, A., Wyszomirski, O. (2004). *Zarzadzanie marketingowe na rynku transportowym*. Gdańsk: Uniwersytet Gdański.

Tłoczyński, D. (2016). *Konkurencja na polskim rynku usług transportu lotniczego*. Gdańsk: Uniwersytet Gdański.

Urfer, B., Weinert, R. (2011). Managing airport infrastructure. In: A. Wittmer, T. Bieger, R. Muller (eds.), *Aviations Systems: Management of the Integrated Aviation Value Chain*. Heidelberg: Springer.

Vogel, H.A. (2001). Airport Competition and Marketing, Airport Economic and Finance Symposium, University of Westminster, 4 February.

Wensveen, J.G. (2007). *Air Transportation. A Management Perspective*. Farnham–Burlington: Ashgate.

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SERVICE PORTFOLIO AS A KEY ELEMENT OF SERVICE STRATEGY

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Abstract

The service strategy details how the service provider will use the service in the process of meeting the set objectives to meet the needs of the customer while achieving the direction of the company's development. Taking into account the complexity of the service process and the needs of customers is the first step in creating a service strategy. The result created services strategy is a service portfolio that properly managed is a key area of activity of the company.

The aim of this article is to present a approach based on a set of recommendations called the Information Technology Infrastructure Library (ITIL). The recommendations allows for the development of a service portfolio, which is a key element of the enterprise services strategy. The assumptions and stages of the service portfolio management process will be presented on the basis of the data characterizing the selected service market in Poland.

The process of portfolio management services allows to specify priorities and optimize the allocation of resources necessary to produce a specific service. It assumes striving to maximize the value of services, enables to know and understand the requirements for services, and select resources to maximize the effects of the service process.

Introduction

Services are a specific area of activity because of the link between the service provider and the recipient, and because of the high dependence between the service provider and the service process. Therefore, all service solutions and delivery should be driven by business needs and requirements, while reflecting the strategies and policies of the service provider organization.

The aim of this article is to present a approach based on a set of recommendations included in Information Technology Infrastructure Library which describe the best practice in IT service management. It provides a framework for the management of IT, and focuses on the continual measurement and improvement of the quality of IT service. It takes into account both business and customer perspective. The recommendations allows for the development of a service portfolio, which is a key element of the enterprise services strategy. The article assumes that the recommendations creates the concept of service creation and expansion irrespective of the type of services being provided. Service portfolio management allows to maximize the value of services, enables to maximize the effects of the service process.

Service life cycle

In the process of creating value for the recipient, profitable service operations and the service quality are crucial. They require new mindsets and deeper insights into the nature of services, relationships, and measurement (Gummesson, 1998). Regardless of the type of service, there is a similar increase in the impact on the consumer of various social, economic and technological factors. Increasing levels of income per capita, the need for a broader range of social benefits, the size and role of the public sector, the complexity of work environments, increased specialization, the relaxation of trade barriers are recognized among the forces that drive higher consumption (Bryson, Daniels, Warf, 2004). These trends contribute worldwide to the growing importance of service activities, thus indicating the directions of strategy design activities.

The service strategy details how the service provider will use the service in the process of achieving goals, which meet the needs of the customers while achieving the directions of the company's development. The overarching source of information in the process of creating service strategies is a set of recommendations called the Information Technology Infrastructure Library (ITIL) commissioned by the UK government.[1] Increasing dependence on IT services has created the need to systematize the methods and techniques used to create a set of consistent and clear guidelines for the service management process. In 2007, an enhanced and consolidated third version of ITIL was published, consisting of five core books covering the service lifecycle, together with the Official Introduction (Kuller, Grabowski, Sames, Vogt, 2010). Each from the five core publications covers up a phase of the service lifecycle from the initial definition and analysis of business requirements in ITIL Service Strategy and ITIL Service Design, through existing in the live environment within ITIL Service Transition, to conduct Service Operation and Continual Service Improvement (IT Service Management Forum, 2012). The first book applies to service strategy. It create guidance to IT service providers and their customers, to help them operate and thrive in the long term by building a clear service strategy, elements of Service Strategy actions and other ITIL books are included in Figure 1.

Taking into account the complexity of the service process and the needs of customers is the first step in creating a service strategy. It is also important to know and understand competitors operating in the market. The idea of strategic service management requires the enterprise to invest, taking into account in the development of the knowledge strategy the opinion of the employees directly involved in the service delivery process, and above all the creation of strong relationships between customers and employees (ITIL, 2007). Creating a service strategy

[1] ITIL was published between 1989 and 1995 by Her Majesty's Stationery Office (HMSO) in the UK on behalf of the Central Communications and Telecommunications Agency (CCTA) – now subsumed within the Office of Government Commerce (OGC).

requires designing, drafting and implementing a procedure that takes into account client objectives, expectations, market conditions and potential.

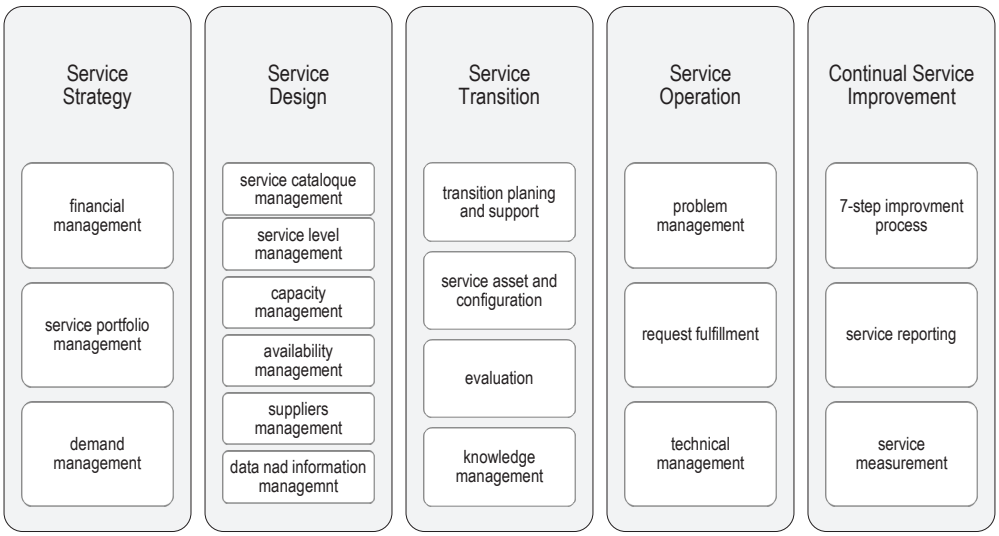

Figure 1. ITIL core books elements

Source: own elaboration based on Kuller et al. (2010), p. 26.

The service strategy provides information on how to provide services, so that they are a key area of the business. The principles on which service strategy is based are included in the service life cycle (ITIL, 2007). The first phase of the cycle includes service strategies that set rules and goals for the service life cycle (Łagowski, 2008). The formulation of ITIL service strategies is based on five basic principles:

- value creation,
- service assets,
- service provider types,
- service structures,
- service strategy fundamentals (Innotrain IT, 2013).

Creating a service strategy by any service provider should be based upon a fundamental acknowledgement that customers do not purchase products, but the satisfaction. Because of that the services provided must be perceived by the customer as a high level value outcome, which allows him to achieve his goals Introduction (Kuller et al., 2010). In the result of creating a service strategy is formed a well-managed service portfolio that is a key area of business activity.

Creating service strategy

The main aim of portfolio management is to ensure that an organization total portfolio of service is aligned with and contributing optimal value to the organization strategic objectives (ITGI IT..., 2006). Therefore, a key element

in creating a service portfolio is to develop a strategy that addresses to the principles mentioned above. Based on the guidelines, basic actions will be presented which enable the creation of a service strategy and are crucial for a service portfolio project.

In order to create a service portfolio, it is necessary to define the pillars under which the strategy should be based on . The first pillar concerns creating value for customers. The value creation process is based on providing utility and warranty of a particular service. Utility allows the service provided to meet customer specific needs. The guarantee is an assurance or commitment of the company to fulfill specific requirements through a given service . Both of these aspects must be taken into account by the enterprise and equally fulfilled in the provision of services. Figure 2 presents the universal scheme of creating services value.

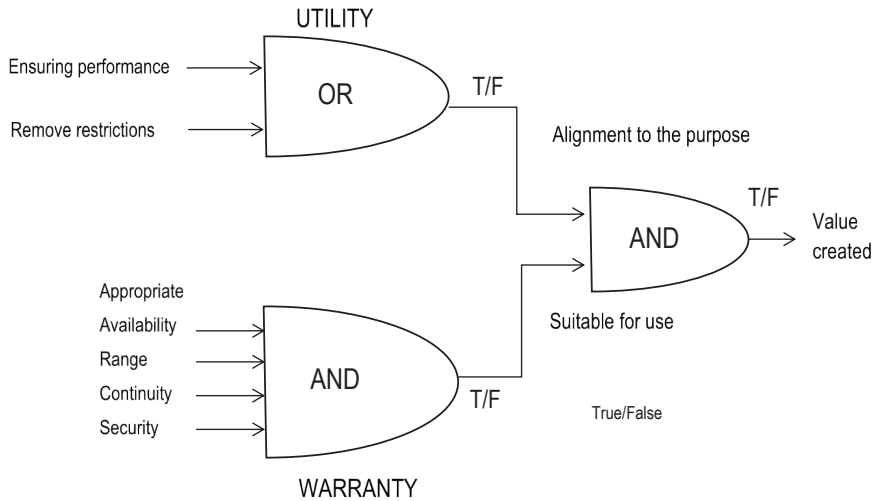

Figure 2. Service value scheme

Source: own elaboration based on ITIL Version 3 (2007); GUS, p. 18.

According to the presented scheme, the service consumer is considering the value in terms of providing utility and warranty. They determine the level of alignment of the services offered to the extent and purpose they were acquired. The company should determine what levels of usability and guarantees should be provided to create the desired level of customer service value. Bearing in mind that both aspects are indispensable, and none of them alone will produce value that will allow to effective competition on the market (ITIL, 2011).

In the process of creating value, the company uses a specific contribution that, through the transformation process, is supposed to create a service that can meet customer needs. The effectiveness of this process depends on the resources available and capabilities that have units functioning in its structure. The next step in creating a service strategy is to identify the resources needed to create the service. The ITIL concept assumes that resources and capabilities are the strategic means for every business to deliver to its customers.

The next step in developing a strategy is to determine the type of service provider. The *Information Technology Infrastructure Library* distinguishes two basic units involved in the service delivery process. The first one deals with

the creation of services and in this case corresponds to the management level, who is the creator of the services offered. The second unit is a direct contractor and includes all employees who have direct contact with the customer. Depending on how the service is delivered, there are three types of providers: internal service providers, shared service units, external service providers (ITIL, 2011).

After defining the type of service provider, the next step in creating a service strategy is to define the service structure. However, this stage consists in the verification by the company of the services provided to customers by specifying:

- all participants in the service process,
- general guidelines for the implementation of the transaction,
- what is the effect of each transaction that influence on the participant,
- how can be maximize the value produced.

The result of this stage is the diagram presenting the scope of services of the company, the methods of their implementation and the entities to which they are directed.

The last step in creating a service strategy is to define a formal framework for the strategy. This is to ensure the existence of official sources that include guidelines, standards and assumptions for the strategy. They have a point of reference, based on theoretical assumptions confirming the correctness of the adopted procedure and preventing the occurrence of process or system errors. Application schema strategy development services in areas other than IT is possible and justified, since there are based on the same basic premise, namely creating value for the customer.

A properly structured service strategy determines what measures an enterprise should use to create services of desirable value to the customer. A strategic approach to service management is to create unique customer relationships based on the readiness to resolve any confusion and inconsistency in this complex process. So that it is possible to have the capacity to expand the relationship between the service provider and the receiver. An effective strategy is based on the ability to use the wealth of resources in creating the value of the service provided. Therefore the task is to create a service offering in which the resources and capabilities available will not only correspond to the present, but will be able to meet future customer needs. To achieve this, the company must create a portfolio of services that will be the right mix of services to meet business outcomes.

Elements of the service portfolio

The service portfolio describes the services provided by the company for the value they produce. Specifies customer needs and how to meet the demand. It takes into account the definition of individual services and allows to compare company offer with competitors. Service portfolio is a complete set of services that is managed by a service provider. It is used to manage the entire lifecycle of all services (IT Service Management Forum, 2012).

The service portfolio is at the heart of the decision-making process regarding the company's service offering (ITIL, 2011). The task of the service portfolio is to provide partial or complete answers to the following questions:

- Why customers should buy the services that company is offer?
- Why should customers buy services from company?
- How is the price structure for services?
- What are our strengths and weaknesses, opportunities and threats?
- How should we use our resources and capabilities? (ITIL, 2007).

In order to implement a service portfolio as in any management process a plan should be create. Design of the service portfolio requires action in accordance with the diagram in Figure 3.

Figure 3. Stages of creating a service portfolio

Source: own elaboration based on an introductory overview of ITIL (2011), p. 4.

The portfolio consists of three categories of services. Includes services planned by the company *Service Pipeline,* catalog of services offered to clients *Service Catalouge* and services withdrawn from the offer *Retired Services*. Figure 4 shows the structure of the service portfolio. The categories of services included in the portfolio correspond to the lifecycle phases of the service:

- planned services are services that are planned to be launched or are in the development phase but not part of the offer available to customers,
- the catalog of services includes services currently available, placed on the market, or services ready to be placed on offer,
- retired services include all services that are no longer active.

Planned services reflect long-term service provider plans for market offerings. This service category action starts with an assessment of the market situation and customer feedback. It includes services that have been requested, which are then evaluated against the requirements that they should meet. This requires the following actions, defines and analyzes services in terms of customer requirements, cost, risk, and expected value. Based on the verification performed, a decision is made to implement or reject the service.

Approved services go to the second category of services, catalogue. It represents preparation of the supplier to provide services to customers and to a specific area of the market (ITIL, 2007). ITIL determines what conditions should be met for each placed service in the catalogue. Regardless of whether the services are active or on the market placement phase they should have:

- detailed specification,
- the characteristics of the service creation activities,

– requisition and procurement procedures,
– SLAs (service level agreements) precisely designated service levels,
– specific support conditions,
– specified prices and return costs (*Understanding ITIL*..., 2008).

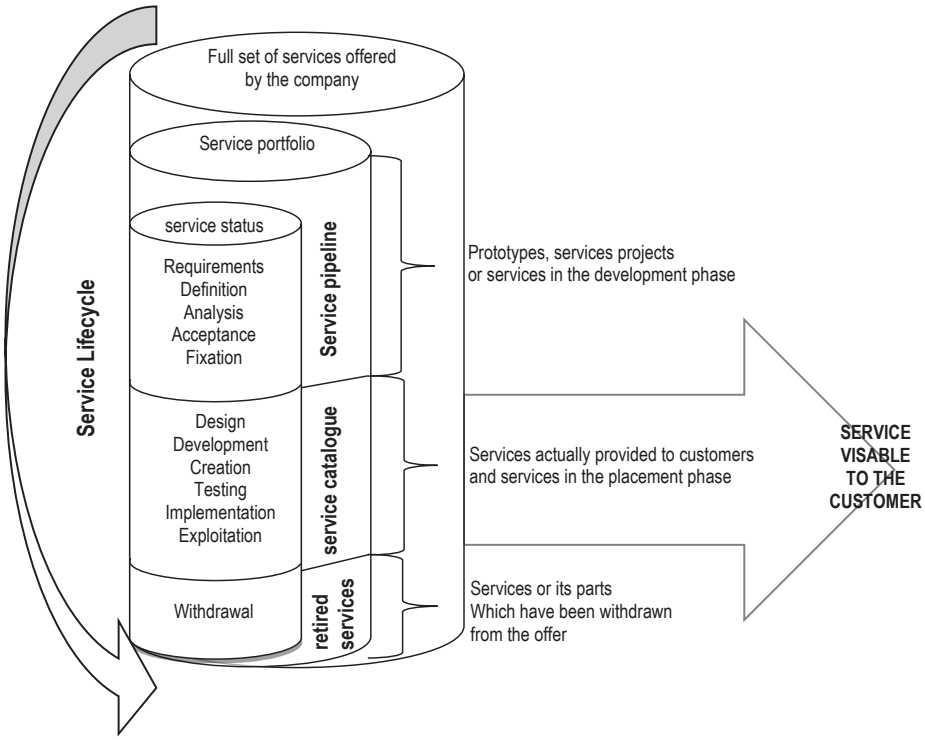

Figure 4. Elements of service lifecycle

Source: own elaboration based on ITIL (2011), p. 25.

The purpose of the catalogue is to provide solutions to customers through a particular service or group of services. Catalogue services can be configured differently, also in terms of price, so as to best meet the customer's need. This is an important tool because it reflects the actual capacity of the provider to create value for customers.

A service catalog is an area in which services are divided into components that include resources, capabilities, and processes. There are defined entry points, ways of using and supplying the service in specified resources. Therefore, the catalog may include different service listings for specific customer groups. The goal is to demonstrate the ability of the service provider to meet customer needs (ITIL, 2007).

The last category of services includes items withdrawn from the offer. It is important to execute periodic reviews of service portfolio to see if there is a service available for retraction. The category of retried service may include, non-demanded services that have been replaced by others or are no longer profitable. The main aim of

service portfolio is to find out what consumers want, how is possible to add value to services they need (Serifovski, Christensen, 2016). These processes allows to identify and define the services that should be provided.

Service portfolio in use

In the knowledge-based economy, the developmental capacities depend more than ever on the quality of human capital, its creativity, innovative capabilities and adaptation to innovation. Recently, this quality is formulated to a decisive extent in the learning process.

Education is one of the factors affecting the socio-economic development of societies. In the process of raising the quality of human capital, not only the level of education of the society is important but also the completed education profile which determines the possibilities of a more effective functioning in the working life. Education is one of the factors determining the ability of an individual to perform a particular service. According to data from the Central Statistical Office in Poland studying a total of 1,348,822 people (GUS, 2016).

At present, globally, regionally and regionally, the gap between the needs of the dynamically changing labor market and the education and qualifications of university graduates appears to be at varying intensity. Therefore, shaping the educational offer is possible by applying an approach based on the ability of an educational service to create value, namely, it can be created on the basis of the assumptions of the service portfolio.

Polish high school graduates have the opportunity to choose a future higher education institution from among 133 public institutions, 283 non-public and 7 ecclesiastical schools. This proves the high competition of the existing educational services market. The key element in choosing a service is its ability to meet the needs of the client, so using the right service strategy makes it possible to build a suitably attractive service offering. Service management is a planned and conscious means of building and managing support structure to meet business and service objectives (A practical Guide to ITIL, 2007).

Based on the assumptions underlying the construction of the service portfolio, an example of a portfolio of educational services has been created. Figure 5 shows four basic educational services portfolio. The diagram illustrated is just an example of what classifications can be subjected to higher education and what can be included in each of the service portfolios.

The construction of the educational services portfolio requires a precise characterization of the service status for each of the portfolios. It will be possible to create portfolios that are optimally matched to current and future needs of recipients. Improving the portfolio requires the inclusion in the process of creating the service portfolio of service recipients as well as local and central units, and employers. The improvement process can take place on the basis of the seven stages used by ITIL. It assumes the following actions: developing a strategy of improvement, define a set o measurements, collecting the necessary data, transforms the data and the information into knowledge, present and use the information, implement improvement (IT Service Management Forum, 2012).

Figure 5 shows the components that build a portfolio for the four core groups of educational services. Each element requires a precise description that reflects the preferences of the target recipient. The example presented is merely a general scheme that needs clarification, but demonstrates that the application of ITIL recommendations may be the basis for building a portfolio of non-IT services.

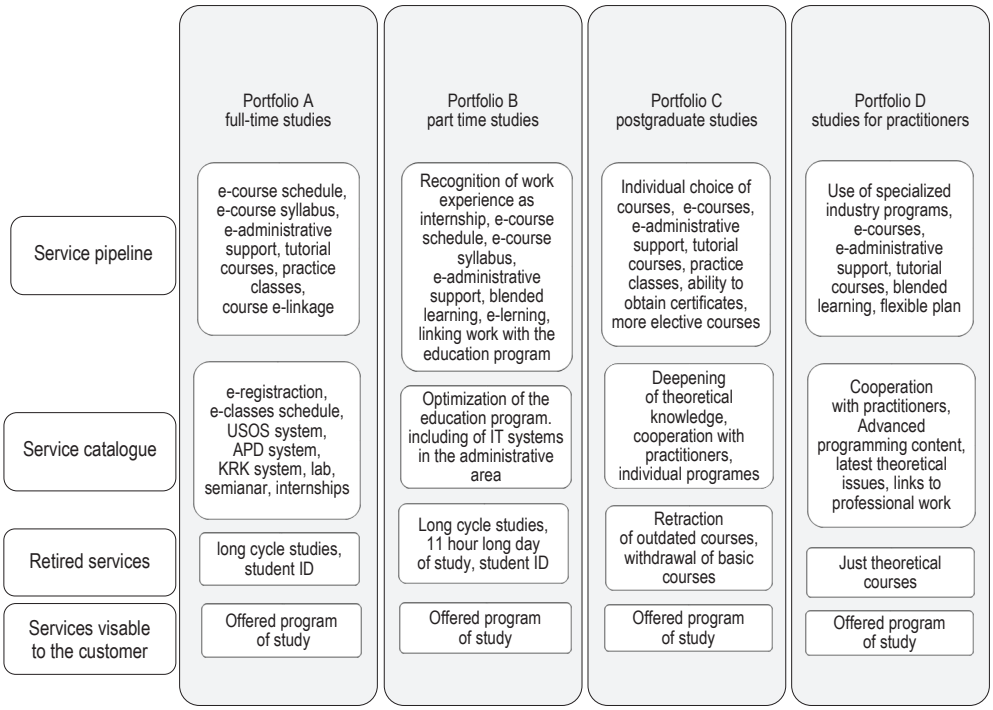

Figure 5. Educational service portfolios

Source: own elaboration.

Conclusions

A service portfolio is a tool that provides constant access to customers for desirable services that they can acquire and consume. The service portfolio is a useful tool for the efficient management of the service process. Analyzing the demand and satisfying it with an adequate service offer makes it possible to increase the efficiency of the company's operations. The portfolio of services helps in making decisions concerning the development of an offer or area of action to meet future requirements. ITIL guidelines are precise and detailed elaboration of considerable usefulness even though they are composed for the construction and development of strategies for IT services may be used for the construction of various services.

References

Barclay, R. (2007). A Practical Guide to IT Service Management and ITIL v3, Part 1 – Moments of Truth. Help Desk Institute.

Bryson, J.R., Daniels, P.W., Warf, B. (2004). *Service Worlds: People, Organisations, Technologies*. Routledge Publishing.

Gummesson, E. (1998). Productivity, quality and relationship marketing in service operations. *International Journal of Contemporary Hospitality Management*, *1* (10), 4–15. Retrieved from: https://doi.org/10.1108/09596119810199282.

GUS (2016). Szkolnictwo wyższe w roku akademickim 2016/2017 dane wstępne. Retrieved from: http://stat.gov.pl/obszary tematyczne/edukacja/edukacja/ szkolnictwo-wyzsze-w-roku-akademickim-20162017-dane-wstepne,8,4.html (4.08.2017).

Innotrain IT (2013). Bringing It Service Management and Innovation to SMEs in Central Europe. Stuttgart.

IT Service Management Forum (2012). An introductory overview of ITIL.

ITGI IT Governance Institute (2006). *Enterprise Value*. Governance of IT Investments, The Val IT Framework.

ITIL (2007). Information Technology Infrastructure Library Version 3, Service Strategy. The Stationery Office

ITIL (2011). Information Technology Infrastructure Library Service Strategy. The Stationery Office.

Kuller, P., Grabowski, M., Sames, P., Vogt, M. (2010). *IT Service Management Methods and Frameworks Systematization*. Innovation Training IT central Europe.

Łagowski, J. (2008). *ITIL v3 – Cykl życia usług IT*, materiały konferencyjne z XIV Konferencji PLOUG pt. „Systemy informatyczne. Projektowanie, implementowanie, eksploatowanie".

Serifovski, N., Christensen, N.S. (2016). *Building a service portfolio*. Axelos Global Best Practice.

Understanding ITIL Service Portfolio Management and the Service Catalog. An approach for implementing effective service lifecycle management (2008). BMS Software. United States.

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GREEN SUPPLY CHAIN – BARRIERS AND BENEFITS OF IMPLEMENTING THE NEW MANAGEMENT STRATEGY – ANALYSIS OF THE EMPIRICAL RESEARCH

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Abstract

The point of view of the considerations shows the main goal was to show the barriers, benefits, and motivators for taking action to build a new management strategy namely the green supply chain. To realize of the aims was used literature analysis, which let to the selections of the extracted factors, and their verifications were based on empirical research conducted in two industries: food and clothing manufacturers. The catalog of factors is the basis for consideration and recommendations for organizations and supply chains, what elements to avoid, or which ones may be a problem in creating the green supply chain, and on the contrary, and to shows they will be motivating for the implementation of the new business strategy.

Introduction and problem description

Interest in the area of the green supply chain and its management has been observed since the 1990s. The evolution of the chain's assumptions and the support of trends in tackling the negative environmental impacts of economic processes contribute to the implementation of the new business strategy in the economy. The rapid industrialization of supply chains means that ecological effects are becoming increasingly problematic. Economic

decision-making, by excluding the environmental interest, can contribute to environmental degradation, global warming, increased greenhouse gas emissions, and depletion of resources. There is no doubt that a holistic approach is needed to implement environmental goals in the supply chain, as well as the deployment of pro-environmental solutions already at the product conceptualization (and chain) stage, design, processing, assembly, storage, packaging, transportation, as well as collection, recycling, reuse, recycling and re-introduction into the economy. Activities cover both products and their packaging, and refer to all processes that take place within the supply chain. Such an approach to the problem contributes to growing interest in the green supply chain. Achieving competitive advantage requires also changes in the supply chain, traditionally understood relationships, scope, and paradigms are no longer sufficient to meet the needs of both customers and the market trends and requirements of competitors. Balancing environmental, economic and social goals contributes to building the foundations of green and sustainable supply chain management (Luthra, Qadri, Garg, Haleem, 2014). The paradigm of the green supply chain is based on the environmental and economic aspects that underpin its construction and operation. Joining the "green" into the supply chain contributes to the environmental and management implications of chain management. The goal of managing the green supply chain is to reduce waste and pollution by incorporating environmental thinking in product design (and packaging) and end-of-life management (Rehman, Shrivastava, 2011). The most important motivators for engaging an organization and reorienting its actions to implement green practices are: cost reduction and profit maximization, which also fosters competitiveness. These practices must involve all actors in the chain, suppliers, manufacturers, and customers. The cooperation of suppliers with partners and customers and producers can lead to better strategic and competitive position if environmental management is implemented in a cost effective manner (Vachon, Klassen, 2006). There is no doubt that the new management strategy is intended to help reduce negative environmental impacts and improve the efficiency of the supply chain (Seuring, Muller, 2008). It is therefore important to identify the barriers and benefits that new solutions bring to supply chain management. It should be pointed out that the presented results provide valuable information on the identified barriers and benefits in companies operating in Poland, as well as give the opportunity to compare with solutions indicated in the world literature. This is also a hint of what to look out for to turn traditional chains into greener ones.

Literature review

The implementation of green supply chain management affects both barriers and benefits. Drivers forces are motivating factors for organizations, and barriers make it difficult to implement a new business model (Jain, Sharma, 2014). It is important to both understand the essence of both occurring, often parallel elements, and be able to take appropriate action to counter the hindrances and to achieve as many positive elements as possible. Green supply chain management refers to all processes that take place in the supply chain. Despite the need to incur high initial costs and investments, the efforts are aimed at improving the quality of processes, products, and increasing customer satisfaction. Green supply chain management can be defined as: integration of environmental thinking into the framework of supply chain management, which includes: product design, materials sourcing, and selection, manufacturing processes delivery of the final product after its useful life (Srivastava, 2007). According to Zhu and Sarkis (2006) shows that processes of the GrSCM have trend to close the loop from suppliers, to manufacturers, to customers and reverse logistics. In order to improve the environmental performance of suppliers and customers, it is important to integrate environmental issues into supply chain management (Lee, Klassen, 2008). Supply chain management is understood to have motivating factors and barriers. On the basis of literature one can point to the

Table 1. Barriers, drivers and benefits for the green supply chain management – selected criterion for the empirical research

Barriers	Drivers
Increase in charges for waste disposal	Supporting the principles of sustainable development
Increase in financial outlays	Development of modern logistics
Increase in energy consumption	Investment recovery (sales) of excess stocks/materials
Stock up	
Increase in investment	Designing products with reduced material energy consumption
Increase in operating costs	
Increase in training costs	Designing products for reuse, recycling, material recovery, components
Material cost increase	
The increase in costs for the purchase of environmentally friendly materials	Product design to avoid or reduce the use of hazardous products and/or their manufacturing process
Increased requirements for suppliers	
Requirement of "green" investment	Collaboration at various levels and in areas to improve the environment
The need for close cooperation in the chain	
No approval from employees	Comprehensive environmental quality management
No demand	Implementation of audit programs
No customer acceptance (cost increase)	Entering new markets
Benefits	
Increased use of "alternative" energy sources	Reduction of solid waste
Improve the image of your business/supply chain	Fall in stocks
Increase the efficiency of processes in the chain	Decrease in the cost of materials purchases
Increase employee involvement in implementing environmental	Decline in consumption/harmful/hazardous materials
Increased customer satisfaction	The decrease in material costs
Increase in the amount of goods delivered on time	Reduce the frequency of environmental accidents
Increase in customer satisfaction	Reduction of waste charges
Increase in profits	Reduce energy costs
Increased productivity of processes in the chain (including logistical processes)	Reducing the fee for waste (pollution related)
Improving energy efficiency	Reduction of fees for ecological disasters
Improvement of the company's environmental situation	Reduce energy costs
Improved operating performance in the chain	Reduction of waste charges
Improved capacity utilization	Reduction of charges for waste released
Improving the quality of processes/products	Reduction of charges for environmental accidents
Increasing the rate of decline of pollutants and waste	Supplier risk management
Falling energy consumption	Trust suppliers
Reduction of pollutant emissions into the atmosphere	Flexibility
Wastewater reduction	Better image

Source: own elaboration.

driving forces that contribute to the implementation of new solutions. The most important ones include: increased intensity of competition, changing economic trends, government regulations, increasing consumer awareness and pressure. There is a close link between driving forces, and economic performance and competitiveness (Rao, Holt, 2005). So far, however, a complete catalog of driving forces, barriers and benefits of greening both in the chain as well as in the single link has not been established. Green supply chain management is based in principle on green procurement, procurement, production, storage, distribution, packaging and transport, green design and green operations (manufacturing and remanufacturing, reverse logistics, waste management) (Srivastava, 2007),

Under which it is important to implement the principles of environmental management, redefine the concept of supply chain, use of recycling and remanufacturing processes, and change the performance measurement system (Beamon, 1999). The catalog of barriers and opportunities can be greatly expanded depending on the specificity of the organization, chain or geographic aspect, the issues are broadly described in the literature of the subject. The main sources of literature include: W. Niemann, T. Kotze, F. Adamo (2016), H. Walker, L. Di Sisto and D. McBain (2008), E. Ojo, C. Mbowa and E.T. Akinlabi (2014), S. Luthra et al. (2014), E. Nikbakhsh (2009). P. Srivastav and M.K. Gaur (2015). M. Javaid, M. Shoeb (2015), A. Diabat, K. Govindan (2011). Literature studies and pilot studies have allowed the selection of elements for the study, which is presented in Table 1.

Research goals and questions

The research objectives of the discussion are based on identifying and verifying motivators, barriers and benefits of greening processes and supply chain links based on literary analysis and empirical research. The most important issues to be addressed in the discussion include:

- what are the motivating factors and barriers to the implementation of green practices in the supply chain in the research organizations,
- which one has the greatest impact on the creation of the green supply chain.

Solution methodology and data collection

The paper was prepared using the method of critical analysis of the literature (Cotrell, 2011). On this basis were selected the criteria catalog for the drivers, barriers and benefits of the implementation and creating the green supply chain management (Table 1). The data was used to create a questionnaire. The empirical studies were prepared in the form of questionnaire (Lydeard, 1995), then were selected a sample of the research and conducted the empirical studies on a selected group of the entities. Criteria selection took place after pre-selection and expert investigation. It was agreed that the factors included in the questionnaire will be taken into account in the questionnaire. The next phase of the survey was followed by an analysis and interpretation of the data. The survey using a questionnaire was conducted throughout of Poland, using the CATI method, in connection with an extensive questionnaire and the need to sacrifice more time to fill it, interviewers performed them for 3 months. The survey was directed to the Food and clothing Industry. On the basis of randomly selected study sample, were examined 222 companies. Other limitations of the study are: the number of employees between 50 and 99 person and responding to the questionnaire employees are: middle to senior levels of management experience, for example supply chain manager, logistics manager, head of logistics or supply chain, procurement and purchasing manager.

Results and discussion

By analyzing the research conducted, one can point out that in most cases classification of elements as barriers, opportunities or motivators coincides with respondents' responses. It is also worth noting that for some respondents some factors are irrelevant when creating a green supply chain, and that, regardless of the industry, the results are practically overlapping.

Table 2. Results of the empirical research

Factors	Percent					
	clohting industry; n = 68			food industry; n = 154		
	barrier	benefits	neutral	barrier	benefits	neutral
1	2	3	4	5	6	7
Increase in charges for waste disposal	95.59	0.00	4.41	95.45	0.00	4.55
Increase in financial outlays	100.00	0.00	0.00	100.00	0.00	0.00
Increase in energy consumption	60.29	0.00	39.71	60.39	0.00	39.61
Increased use of “alternative” energy sources	45.59	30.88	23.53	44.16	32.47	23.38
Increased productivity of processes in the chain (including logistical processes)	0.00	94.12	5.88	0.00	94.16	5.84
Increase the efficiency of processes in the chain	0.00	97.06	2.94	0.00	97.40	2.60
Increase employee involvement in implementing environmental,	0.00	63.24	36.76	0.00	62.99	37.01
Increased customer satisfaction	0.00	86.76	13.24	0.00	86.36	13.64
Stock up	83.82	0.00	16.18	83.77	0.00	16.23
Increase in investment	67.65	0.00	32.35	66.23	0.00	33.77
Increase in operating costs	45.59	5.88	48.53	44.16	5.84	50.00
Increase in training costs	100.00	0.00	0.00	100.00	0.00	0.00
The increase in costs for the purchase of environmentally friendly materials	32.35	0.00	67.65	31.82	0.00	68.18
Material cost increase	92.65	0.00	7.35	92.86	0.00	7.14
Increase in profits		94.12	5.88		94.16	5.84
Improve the image of your business/supply chain	0.00	94.12	5.88	0.00	94.16	5.84
Improving energy efficiency	0.00	60.29	39.71	0.00	59.74	40.26
Improvement of the company’s environmental situation	0.00	35.29	64.71	0.00	35.06	64.94
Improved operating performance in the chain	0.00	11.76	88.24	0.00	11.69	88.31
Improved capacity utilization	0.00	89.71	10.29	0.00	88.96	11.04
Improving the quality of processes/products	0.00	57.35	42.65	0.00	60.39	39.61
Increasing the rate of decline of pollutants and waste	0.00	51.47	48.53	0.00	53.25	46.75
Increase the quantity of goods delivered on time	0.00	27.94	72.06	0.00	28.57	71.43
Falling energy consumption	0.00	58.82	41.18	0.00	57.79	42.21
Reduction of pollutant emissions into the atmosphere	0.00	94.12	5.88	0.00	94.16	5.84
Wastewater reduction	0.00	70.59	29.41	0.00	70.78	29.22
Reduction of solid waste	0.00	76.47	23.53	0.00	77.92	22.08
Fall in stocks	0.00	69.12	30.88	0.00	0.00	0.00
Decrease in the cost of materials purchases	0.00	94.12	5.88	0.00	68.18	31.82
Decline in consumption/harmful/hazardous materials	0.00	38.24	61.76	0.00	94.16	5.84
The decrease in material costs,	0.00	23.53	76.47	0.00	38.96	61.04
Reduce the frequency of environmental accidents	0.00	54.41	45.59	0.00	23.38	76.62
Reducing the fee for waste (pollution related)	0.00	63.24	36.76	0.00	52.60	47.40
Reduction of fees for ecological disasters	0.00	67.65	32.35	0.00	64.29	35.71
Reduce energy costs	0.00	47.06	52.94	0.00	66.23	33.77
Reduction of waste charges	0.00	35.29	64.71	0.00	48.70	51.30
Reduction of charges for waste released	0.00	41.18	58.82	0.00	35.71	64.29
Reduction of charges for environmental accidents	0.00	42.65	57.35	0.00	41.56	58.44
Increased requirements for suppliers	57.35	0.00	42.65	0.00	42.86	57.14
Requirement of “green” investment	61.76	0.00	38.24	57.79	0.00	42.21
The need for close cooperation in the chain	22.06	32.35	45.59	61.69	0.00	38.31
No approval from employees	38.24	0.00	61.76	22.73	33.12	44.16
No demand	69.12	0.00	30.88	38.31	0.00	61.69

1	2	3	4	5	6	7
No customer acceptance (cost increase)	55.88	0.00	44.12	70.78	0.00	29.22
Supplier risk management	14.71	26.47	58.82	57.14	0.00	42.86
Trust suppliers	0.00	70.59	29.41	15.58	25.32	59.09
Flexibility	0.00	70.59	29.41	0.00	70.78	29.22
Better image	0.00	58.82	41.18	0.00	58.44	41.56
Supporting the principles of sustainable development	0.00	70.59	29.41	0.00	70.78	29.22
Development of modern logistics	0.00	67.65	32.35	0.00	66.88	33.12
Investment recovery (sales) of excess stocks/materials	0.00	16.18	83.82	0.00	18.18	81.82
Designing products with reduced material energy consumption	0.00	10.29	89.71	0.00	11.69	88.31
Designing products for reuse, recycling, material recovery, components	0.00	8.82	91.18	0.00	9.74	90.26
Product design to avoid or reduce the use of hazardous products and/ or their manufacturing process	0.00	8.82	91.18	0.00	9.74	90.26
Collaboration at various levels and in areas to improve the environment	0.00	22.06	77.94	0.00	21.43	78.57
Comprehensive environmental quality management	0.00	16.18	83.82	0.00	16.23	83.77
Implementation of audit programs	8.82	7.35	83.82	8.44	7.79	83.77
Entering new markets	0.00	16.18	83.82	0.00	16.23	83.77

Source: own elaboration.

Interestingly, there is a lack of demand in the clothing industry is a barrier, which is not a problem for the food industry. In other cases, respondents respond similary. It is clear that certain criteria in literature describe as barriers are barriers to the organization, which were examinated, as well as opportunities or motivators. The interesting result is that for the most organizations, drivers are considered it indifferent to creating a green supply chain. This means that actions need to be taken to reduce the number of barriers and costs associated with them, and the implemented solutions will contribute to increasing the benefits, both in terms of their numbers and percentage of respondents who take the actions they consider beneficial, and not, for example, affecting the creation and operation of the supply chain.

Limitations

Definitely a limiting factor, both considerations as well as interpretations and general conclusions are the selected sectors, the number involved in the study and the size of the enterprise. One should ask yourself whether in other conditions and in other industries the results would appear in a similar way.

Conclusions

By analyzing the empirical research conducted, it is important to point out that the identified factors indicating the benefits, barriers or motivators for undertaking green supply chain construction activities in a large part were confirmed by the respondents. The biggest barriers are Increase in charges for waste disposal, Increase in financial outlays, Increase in training costs, Material cost increase. As benefits it could be point: Decrease in the cost of materials purchases, Reduction of pollutant emissions into the atmosphere, Increase in profits, Improve the image of your business/supply chain, Increased customer satisfaction, Increased productivity of processes in the chain (including logistical processes), Increase the efficiency of processes in the chain. An interesting element of the discussion is the indication that some of the respondents recognize the presented factors as completely

indifferent. This means that they do not have an impact on the creation and operation of the green supply chain. Recommendations may refer to further education and training, which will help to identify benefits and barriers better to offset the number of neutral factors that respondents do not consider relevant and which affect the development of the green supply chain. The study also showed that both the number and the range of benefits are definitely greater than the potential barriers. Motivators should be supported and benefits should be emphasized, and costs and barriers to the introduction of the green supply chain should be eliminated.

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References

Beamon, B.M. (1999). Designing the green supply chain. *Logistics information management*, *4* (12), 332–342.

Cottrell, S. (2011). *Critical thinking skills: Developing effective analysis and argument*. Basingstoke: Palgrave Macmillan.

Diabat, A., Govindan, K. (2011). An analysis of the drivers affecting the implementation of green supply chain management. *Resources, Conservation and Recycling*, *6* (55), 659–667.

Jain, V.K., Sharma, S. (2014). Drivers affecting the green supply chain management adaptation: a review. *IUP Journal of Operations Management*, *1* (13), 54.

Javaid, M., Shoeb, M. (2015). *International Journal of Advanced Technology in Engineering and Science*, *3* (6), 2348–7550, p. 129. Retrieved from: www.ijates.com.

Lee, S.Y., Klassen, R.D. (2008). Drivers and enablers that foster environmental management capabilities in small- and medium-sized suppliers in supply chains. *Production and Operations management*, *6* (17), 573–586.

Luthra, S., Kumar, V., Kumar, S., Haleem, A. (2011). Barriers to implement green supply chain management in automobile industry using interpretive structural modeling technique: An Indian perspective. *Journal of Industrial Engineering and Management*, *2* (4), 231–257.

Luthra, S., Qadri, M.A., Garg, D., Haleem, A. (2014). Identification of critical success factors to achieve high green supply chain management performances in Indian automobile industry. *International Journal of Logistics Systems and Management 1*, *2* (18), 170–199.

Lydeard, S (1995). The questionnaire as a research tool. *Family Practice*, *1* (8), 84–91.

Niemann, W., Kotze, T., Adamo, F. (2016). Drivers and barriers of green supply chain management implementation in the Mozambican manufacturing industry. *Journal of Contemporary Management*, *1* (13), 977–1013.

Nikbakhsh, E. (2009). Green supply chain management. In: *Supply chain and logistics in national, international and governmental environment* (pp. 195–220). Physica-Verlag HD.

Ojo, E., Mbowa, C., Akinlabi, E.T. (2014). Barriers in implementing green supply chain management in construction industry. In: Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management (IEOM) (pp. 7–9).

Rao, P., Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? *International journal of operations & production management*, *9* (25), 898–916.

Rehman, M.A.A., Shrivastava, R.L. (2011). An innovative approach to evaluate green supply chain management (GSCM) drivers by using interpretive structural modeling (ISM). *International Journal of Innovation and Technology Management*, *2* (8), 315–336.

Seuring, S., Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of cleaner production*, 15 (16), 1699–1710.

Srivastav, P., Gaur, M.K. (2015). Barriers to Implement Green Supply Chain Management in Small Scale Industry using Interpretive Structural Modeling Technique – A North Indian Perspective. *European Journal of Advances in Engineering and Technology*, *2* (2), 6–13.

Srivastava, S.K. (2007). Green supply-chain management: a state-of-the-art literature review. *International journal of management reviews*, *1* (9), 53–80.

Vachon, S., Klassen, R.D. (2006). Green project partnership in the supply chain: the case of the package printing industry. *Journal of Cleaner production*, *6* (14), 661–671.

Walker, H., Di Sisto, L., McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. *Journal of purchasing and supply management*, *1* (14), 69–85.

Zhu, Q., Sarkis, J. (2006). An inter-sectoral comparison of green supply chain management in China: drivers and practices. *Journal of cleaner production*, *5* (14), 472–486.

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INNOVATIVE SOLUTIONS USED IN SERVICES IN MUNICIPAL WASTE MANAGEMENT SYSTEMS

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Abstract

The basic services used in the field of municipal waste management systems are the collection and management of waste. Under these two basic services it is possible to use a series of innovates and so that the entire system from the point of view of the resident functioned in a smooth and at the same time not generate nuisance. They are introduced, among others, mobile applications, informing residents about the date of exportation of waste by specific factions. Increasingly, residents are also able to make declarations and corrections via the Internet. From the point of view of the community is also important is the use of innovative solutions in order to verify the type of waste and place of their creation. For this purpose, GPS and RFID are used. It is also very important to use innovations in waste management facilities themselves. Such solutions allow to reduce the negative impact of waste on the environment, as well as reduce the nuisance for the inhabitants, due to the reduction of the odor.

Introduction

From 1 July 2011 in Poland, has changed legislation on municipal waste management (Ustawa..., 2011), enforced by EU requirements. Since then, the municipality has been responsible for the collection and management of waste within the developed systems. Municipalities are forced to comply with high standards of waste management, and further legislative changes.

The main assumption of the legal changes introduced is to encourage greater innovation in services related to municipal waste management systems and to create new business opportunities conducive to sustainable development in the waste management market (Lipińska, 2016; Mesjasz-Lech, 2014).

According to Directive 2006/12/EC of The European Parliament and of The Council of 5 April 2006 on waste (Directive..., 2006), term 'waste' shall mean any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard.

In practice, this means that the decision about what is municipal waste, is taken by the residents. The amount of municipal waste generated by residents shows their level of environmental awareness and behaviors they choose. Differentiation of the amount of waste generated per capita in the EU countries is very high, which has a direct impact on the waste management.

In the case of municipal waste it is also extremely important to examine how they are developed. The concept is to collect, transport, recover and dispose of waste, and to supervise these activities and places of waste disposal.

Innovative solutions applied in waste management allow to meet strict environmental protection requirements and adapt to EU requirements.

Municipal waste management systems in Poland

Legislative changes introduced in Poland in 2011 assume that the government, which is responsible for serving the local community, should also be responsible for receiving and appropriate waste management (Ulfik, Nowak, 2014).

Very important in the functioning of the municipal waste management system is the level of awareness of the inhabitants, especially in the context of segregation of waste at their place of origin (Smolnik, 2013). This has a significant impact on the cost of operating the entire system, including economic costs of environmental protection, and the selection of logistical processes needed (Bajdor, Starostka-Patyk, Lis, 2016; Krzywda, 2012). Equally important are pro-ecological solutions in enterprises, consistent with the ideas of sustainable development and corporate social responsibility.

Local governments, apart from a whole range of responsibilities aimed at improving the quality of life of local communities (Dziadkiewicz, 2013), were additionally obliged to construct, maintain and evaluate the municipal waste management system. The composition of these systems include the Regional Systems Processing Municipal Waste, which uses Best Available Technique (BAT) to apply new available waste treatment technologies or provide mechanical and biological waste treatment (Siemiątkowski, 2012) combined with the prior separation of mixed waste from municipal waste that is suitable for recovery or recycling (Piontek, 2014; Zbroński, 2015).

IT Services in the management of municipal waste

It is practically impossible to operate in any industry without the use of specialized IT tools. In terms of IT systems relating to waste management, diversity is enormous. They should have a wide range of functionality and include such functions as: creation of analyzes, forecasts, reports, statements and creation of databases for the purposes of registration and exchanging data with other entities. Applied systems should also provide the opportunity to communicate the municipality and residents via the Internet (Stępień, Kurus, Białecka, 2015).

There are many applications available on the Polish market that have all or most of these functionalities. These include the following applications: eco-soft.pl (Eko-Soft 2018 and Ewidencja Odpadów 2018), ARISCO (GOMiG®),

darsoft.pl (package of various programs, including Ewidencja Odpadów 2018), Ulisses (Ulisses PSZOK and Ulisses ZZO), Zeto Opole (Mewa) and many other.

In the field of waste management in Poland, municipalities are obliged to fulfill the function of information in proper waste management, but above all to promote the selective collection of waste. Lack of transparent and easily accessible information about selective collection, places and dates of waste collection, discourages residents to segregate. Retention of waste selective collection points, also affects the perception of deterioration by the inhabitants of the same system (Hanczar, Pisiewicz, 2015).

Currently, the most commonly used systems, consisting in publication on the websites of the respective schedules are often very complicated, lacking in transparency and discourage their citizens to the whole system, and thus to segregate waste. Mobile applications are a good solution in this area.

Mobile application "Kiedy Wywóz"

In Poland there is more and more widely used mobile application "Kiedy Wywóz" created by SophScope Sp. z o.o (http://kiedywywoz.pl).

This application is an innovative solution for the communication between the residents and municipalities in terms of waste collection. Its basic functionality consists of a transparent and convenient information on the dates of collection of waste, both for single family housing, multi-family housing and companies in municipalities that use this application (for example Bielsko-Biała, Brzeg, Częstochowa, Jaworzno, Katowice, Kołobrzeg, Kraków, Kraków, Lublin, Łódź, Opole, Poznań, Sosnowiec, Tarnowskie Góry, Ustka, Wałbrzych, Warszawa, Wrocław, Zakopane).

Residents to check where and when they will be picked up individual waste fractions, only need to find the correct address. They can get information about individual factions very quickly and conveniently. In addition, the application also allows to find the Stationary Selective Municipal Waste Collection Points (SPSZOK), along with the possibility to route the map. Residents using this application may also directly from the phone with a photo, provide information about irregularities such as non-collection of waste or generated wild dump (Hanczar, Pisiewicz, 2015; Stefko, Nowak, Ulfik, 2015).

The benefits of using modern IT tools

The applied information systems used in municipal waste management, or is not part of the functionality or for various reasons they are not implemented. Still rare in Poland functionality consists in the possibility of electronic filing and adjustments of declaration, which would significantly facilitate communication between residents and the municipality, and thus influence in a significant way to the convenience of residents. Another innovative step could be an electronic form of communication between the property owners and municipalities, even in the field of reminder fees, information on changes in the rates or the possibility of lodging a complaint. Such solutions could significantly reduce the cost of operating systems because of the reduced cost of delivering information by mail, which currently amounts to several hundred thousand zlotys per year in individual municipalities.

For such solutions, the problem remains the appropriate user authentication and security of data sent to the municipality or the company in charge of system of waste management. A good solution would be to use an electronic signature or a trusted ePUAP profile (Electronic Platform of Public Administration Services). In the case of an electronic signature, the problem is the additional costs that the user must incur. In the case of the trusted ePUAP profile, the problem is frequent failures and the system is still underdeveloped. For stable and functional

solutions, most likely we will have to wait a bit longer and no municipality in Poland is able to deal with such problems. The solution must take place on the side of the government administration and it is the central and not the self-governmental authorities that must provide adequate solutions.

In the context of the mobile application "Kiedy Wywóz", the benefits of using it are huge. It gives every user an easy and convenient way to reach information on the waste collection schedule. Due to the great popularity of this application among Polish municipalities, it has become a monopolist on the market. Most of the big cities use this application, although also many multi-municipal and multi-urban communes have implemented this system of informing residents about the schedule of waste collection. The only downside of using this application are the costs on the side of the municipality. First of all, using the mobile application "Kiedy Wywóz" involves a license fee. Secondly, it is necessary to properly enter the schedule data into this application. However, these costs are unnoticeable within the entire waste management system. Benefits for individual users, however, are enormous. With this application you can easily check the date of collection of individual factions, which makes it easier to segregate waste, it is easy to check when each fraction will be collected. A very important social benefit of using this application in a given municipality is a quick and very easy process of reporting wild waste dumps. Thanks to such a large facilitation, wild landfills can be cleaned faster, and at the same time, because of the great ease of reporting wild dumps, there is a greater likelihood of catching the perpetrators.

Use of GPS and RFID

Among the innovations associated with IT solutions in waste management, should be mentioned more often used GPS and RFID. The use of GPS systems can be one of form of control over the process of receiving and exporting waste by the companies that win the tenders. On the proper recorders installed in the vehicles collecting the waste, are recorded events such as loading and unloading (special sensors are installed for this purpose) as well as the route of the vehicle. The use of GPS systems with recorders, prevents cheating dishonest entrepreneurs by loading the wastes from areas not covered by the tender. Another innovative improvement of this solution is the use of radio frequency identification RFID refuse trucks and containers. If all waste containers are equipped with RFID sensors and garbage trucks in RFID terminals, then such system is very secure. In addition, it also allows for greater control of the quality of waste segregation or lack thereof by the locals due to the assignment of specific containers for places (Nowak, Grabara, Ulfik, 2015; Stefko et al., 2015).

Ecoinnovations used in waste management

Scandinavian countries, Germany and Switzerland are the leading countries in Europe with innovative solutions in the field of waste management (Grzymała, 2013). In Poland, in terms of waste management, eco-innovation is mainly used in products and processes (Urbaniec, 2015). However, they are not as frequent and widespread as among the leaders in the industry.

In the case of innovations used in waste management companies among the most common, the following should be distinguished:

1. Thermal waste treatment – consisting in the use of technologies that mainly involve combustion or pyrolysis, leading to a reduction in the amount of waste deposited, and recovery heat or electricity from the waste (Jurczyk, Koc-Jurczyk, 2017; Lapčík, 2013; Levidow, Upham, 2017; Łapińska, 2014).

2. Technologies to reduce odor in waste treatment plants and landfills, eg. through the use of bioreactors for composting in a closed system (den Boer, den Boer, Jager, 2005; Potdar et al., 2016; Siemiątkowski, 2012).
3. Effluent treatment technologies generated at landfills.
4. Acquiring heat or electricity from biogas produced in the process of composting or in landfills in the process of fermentation of stored waste (Kalinichenko, Havrysh, Perebyynis, 2016).
5. Production of fertilizers, both in the bio composting process and in the combustion of selected waste fractions (Łapińska, 2014; Siemiątkowski, 2012).

In the case of Poland, there is still much to be done in terms of applying innovative solutions to waste management. First of all it is necessary to build more waste incineration plants.

Conclusions

According to the Ordinance of the Minister of the Environment of 14 December 2016 on levels of recycling, preparation for reuse and recovery by other methods of certain fraction of municipal waste (Rozporządzenie..., 2016), the level of recycling of paper, metal, plastics and glass in 2020 is to reach 50%. To meet these high requirements, a comprehensive approach to the problem of municipal waste is needed. It may be helpful to use innovative solutions. It is important to carry out activities that will result in more efficient segregation of waste among the population. This should include, first and foremost, efficient information on the inhabitants and control of the operation of the systems. Equally important are eco-innovation measures, which reduce the negative environmental impacts of economic processes and lead to a reduction in resource use. It is hoped that the application of innovative solutions in the management of municipal waste in Poland will become more and more common and will contribute to the improvement of the situation in this sector.

References

Bajdor, P., Starostka-Patyk, M., Lis, T. (2016). The Analysis of Waste Management in Czestochowa City for the Years 2011–2014. *Transportation Research Procedia*, *16* (March), 16–24.

den Boer, E., den Boer, J., Jager, J. (2005). *Planowanie i optymalizacja gospodarki odpadami Planowanie i optymalizacja gospodarki odpadami*. Wrocław: Oddział Dolnośląski PZiTS.

Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste, Official Journal of the European Union (2006).

Dziadkiewicz, M. (2013). Temporary Premises in the Management of Municipal Property Resources. *Polish Journal of Management Studies*, *7*, 265–281.

Grzymała, Z. (2013). Innowacje na rynku sektora komunalnego w Polsce = Innovations on the Municipal Market in Poland. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, *23*, 57–67.

Hanczar, P., Pisiewicz, D. (2015). Rozwiązania ICT wspomagające zbiórkę odpadów komunalnych. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, *249*, 204–216.

Jurczyk, Ł., Koc-Jurczyk, J. (2017). Thermal Conversion of Municipal Waste Into Energy: Prospects for the Sub-Carpathia. *Journal of Ecological Engineering*, *2* (18), 157–165.

Kalinichenko, A., Havrysh, V., Perebyynis, V. (2016). Evaluation of biogas production and usage potential. *Ecological Chemistry and Engineering S*, *3* (23), 387–400.

Krzywda, D. (2012). Procesy logistyczne w gospodarce stałymi odpadami. *Logistyka*, *2*, 831–838.

Lapčík, V. (2013). Municipal-Waste-To-Energy Potential. *Inżynieria Mineralna*, *2* (14), 125–130.

Levidow, L., Upham, P. (2017). Socio-technical change linking expectations and representations: Innovating thermal treatment of municipal solid waste. *Science and Public Policy*, *2* (44), 211–224.

Lipińska, D. (2016). *Gospodarka odpadowa i wodno-ściekowa*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Łapińska, J. (2014). Kreowanie i wdrażanie ekoinnowacji produktowych i procesowych w przemyśle utylizacyjnym. *Marketing i Rynek*, *8*, 517–522.

Mesjasz-Lech, A. (2014). Municipal Waste Management in Context of Sustainable Urban Development. *Procedia – Social and Behavioral Sciences*, *151*, 244–256.

Nowak, S., Grabara, J., Ulfik, A. (2015). Application of RFID and ICT in Reverse Logistic in Poland. *Applied Mechanics and Materials*, *718*, 150–155.

Piontek, W. (ed.) (2014). *Poradnik dla gmin. Kompleksowe wdroz˙enie ustawy o utrzymaniu porządku i czystości w gminach*. Kraków: Stowarzyszenie Gmin i Powiatów Małopolski.

Potdar, A., Singh, A., Unnnikrishnan, S., Naik, N., Naik, M., Nimkar, I. (2016). Innovation in solid waste management through Clean Development Mechanism in India and other countries. *Process Safety and Environmental Protection*, *101*, 160–169.

Rozporządzenie Ministra Środowiska z dnia 14 grudnia 2016 r. w sprawie poziomów recyklingu, przygotowania do ponownego użycia i odzysku innymi metodami niektórych frakcji odpadów komunalnych (2016).

Siemiątkowski, G. (ed.) (2012). *Mechaniczno-biologiczne przetwarzanie frakcji biodegradowalnej odpadów komunalnych*. Opole: Wydawnictwo Instytut Śląski Sp. z o.o.

Smolnik, P. (2013). Istota i znaczenie gospodarki odpadami komunalnymi. *Zeszyty Naukowe Politechniki Częstochowskiej Zarządzanie*, *10*, 69–75.

Stefko, R., Nowak, S., Ulfik, A. (2015). Selected aspects of use IT in waste management. *Applied Mechanics and Materials*, *795*, 215–219.

Stępień, M., Kurus, K., Białecka, B. (2015). It Systems Supporting Waste Management in Communities – An Overview of Innovative Functions. *Management Systems in Production Engineering*, *4* (20), 210–212.

Ulfik, A., Nowak, S. (2014). Determinants of Municipal Waste Management in Sustainable Development of Regions in Poland. *Polish Journal of Environmental Studies*, *3* (23), 1039–1044.

Urbaniec, M. (2015). Towards Sustainable Development through Eco-innovations: Drivers and Barriers in Poland. *Economics and Sociology*, *4* (8), 179–190.

Ustawa z dnia 1 lipca 2011 r. o zmianie ustawy o utrzymaniu czystości i porządku w gminach oraz niektórych innych ustaw (Dz.U. 2011 nr 152 poz. 897).

Wysocki, J. (2016). Strategic approach to proecological activities of companies. *European Journal of Service Management*, *2* (18), 63–69.

Zbroński, D. (2015). Odzysk i unieszkodliwianie odpadów komunalnych zebranych z obszarów powstania. *Archiwum Gospodarki Odpadami i Ochrony Środowiska*, *4* (17), 101–114.

http://kiedywywoz.pl (15.07.2017).

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QUALITATIVE INVESTIGATION OF STANDARDISATION IN SERVICE ORGANIZATIONS – A LEAN SERVICE VIEWPOINT

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Abstract

The issue of standardisation has not yet been widely researched in the service industry. At the same time standards are the main management methodology to achieve quality and repeatability in service delivery processes. Moreover, standards according to Lean methodology are a means of gathering and spreading knowledge across the organization. The study aims to investigate standardisation in service organizations in the light of the Lean Management framework. The study employs the qualitative research approach. A sample of 30 service managers were asked open-ended questions referring to existing standards. The gathered stories were processed according to content analysis principles. The study concludes that the current approach to service standardisation is very far from Lean Management, which is a huge challenge for Lean Service dissemination.

Introduction

Lean Management is a management methodology which is becoming more and more popular in many industries all over the world. Many companies have experienced outstanding productivity growth in recent decades thanks to this methodology. It was developed in Japanese companies over a period of several decades, and after the presentation of outstanding results it started to be desired by other companies from many industries, at first

manufacturing ones. Now, the manufacturing world is pretty experienced in Lean principles and tools, as well as the Lean transformation process.

Lean Management in the service industry has not yet been widely introduced in companies. Lean methodology is being implemented by some service companies, and a slightly wider implementation is noticed in healthcare services (Burgess, Radnor, 2013), but there are still plenty of fields of ignorance as well as challenges related to the practical implementation of the Lean approach to services. This is because service organization is noticeably different from the manufacturing one, and its delivery system has different characteristics compared to the manufacturing system (Grönroos, 2007; Vargo, Lusch, 2004).

Standardisation consists in using standards within an organization, and standardisation is a main concept in the whole, fairly extensive Lean methodology. This study aims to identify how standardisation works in service organizations, and to what extent current practices of service standardisation are consistent with the Lean Management framework. The study employs the qualitative approach, and the empirical investigation takes advantage of the Critical Incident Technique.

Standardisation in services

Standardisation has being exploited by service organizations for a long time. A standard in the service literature is understand as a routinized process with well-defined tasks and an orderly flow of customers. So standardisation helps to provide uniformity in service quality because the process is easier to control (Fitzsimmons, Fitzsimmons, 2008, p. 77). In the service industry, the blueprints methodology is perceived as a powerful management tool (Bitner, Ostrom, Morgan, 2008). It is probably the most widespread approach to service standardisation. Some authors highlight that most services defy standardisation because of their variability and unpredictability (Haksever, Render, Russell, Murdick, 1999). The reason mostly lies in the fact that services are co-produced – they emerge with the simultaneous participation of the customer. According to research (Jylhä, Junnila, 2014), service employees, during the co-creation process, do not always know what the customers really require, so standardisation understood as routinization becomes more challenging.

The Toyota Production System is perceived as an unmatched model of Lean Management. Hino (2006) mentions that in the centre of Toyota's gene transmission are documented procedures. He calls the standardisation Toyota's DNA. Work standards form a management cornerstone of Toyota's system. It is a fundamental part of step by step improvement. Ohno (1988) from Toyota admires Henry Ford, who wrote that standardisation means nothing unless it means standardising upward. Today, in the Lean Management approach a standard is perceived as a documented expression of the best method known at a given point in time, and after improvement it is changed into a new standard.

The literature mentions two types of standardisation techniques in Lean Service: the service standard process as a method of doing work in a constant cycle time, and the standard operations display as a visualised sequence of process steps (Sarkar, 2008). Others (Haeckel, Carbone, Berry, 2003, p. 22) argue that pretty widely used blue prints are not sufficient because service standards need narratives which capture the tone and texture of the desired performance. Hunter's (2011) research reveals that frontline service staff are willing to go above and beyond their job descriptions to ensure total customer satisfaction. A glimpse at the literature suggests that there is absolutely no clear view on standardisation in the service organization, and that the Lean approach might be particularly inspiring in this field.

Research methodology

Standards in the service industry are very rarely studied empirically. The idea of the study is to observe standardisation from a fairly new angle, which is the Lean Management methodology, so the qualitative research strategy is necessary. An in-depth insight into the investigated issue is allowed by employing the Critical Incident Technique for gathering the field data. As scholars underline, the Critical Incident Technique can be employed to investigate many different aspects of a service over the duration of an encounter's enactment (Wong, Sohal, 2003). This technique is based on getting people to tell stories about things which have happened to them (Lockwood, 1994). The stories gathered from the respondents are transcribed and analysed according to content analysis principles.

The respondents were recruited from randomly chosen service companies operating in the B2C market. Managers from 30 service companies were interviewed with open-ended questions. The query presented to respondents has a complex nature, and it was as follows: 'What do you associate with the notion 'standards' in the services you are working on? Describe as comprehensively as you can a standard you know, and how this standard works in your organization'. After the description of a standard a respondent was asked to describe another one if (s)he could. The answers were recorded and transcribed afterwards.

All in all 61 standards were identified in the provided stories. This means that this number of organizational routines are reported, each of them reflecting a particular issue within a service organization. Sometimes a respondent provided a series of service standards which in fact was only one standard devoted to one particular issue in an organization. Conversely, a respondent sometimes reported a long description as one standard which in fact was interpreted as several separate standards. The number of identified standards appeared only in the in-depth analysis of the reported stories.

What is standardised in service organizations?

The crucial issue while performing content analysis. It is repeatedly studying and categorising the stories on standards to identify exactly what organization sphere/problem is standardized. A number of organizational issues/spheres were identified as being objects of standardisation. They are listed in Table 1 below, along with numbers and percentages. The standards identified as individuals are not presented in the table.

Table 1. The groups of standards identified in interviewees' stories

Category	Number	Percentage of objects	Percentage of standards
Staff outfit	18	60	30
Conversation with the customer	8	27	13
Customer treatment	7	23	11
Staff appearance	5	17	8
Cleanliness	3	10	5
Selected process steps	3	10	5
Customer service process	2	7	3
Service sequence	2	7	3
Telephone call	2	7	3
Access to information	2	7	3

Source: own studies.

The most frequently appearing object of service standardisation is 'staff outfit', which appeared in 60% of entities, and its frequency is noticeably greater than any other. The object of these standards is the variety of elements worn by service staff. The standards are set to enforce the wearing of the company's uniforms and other clothing. It is noticeable that the standard of the staff outfit always exists as 'came from the outside', considering the viewpoint of service staff. And it is absolutely clear that these standards are stable for long time. They might change along with company brand renewal, but their main purpose is to strengthen the company's image. Apart from the visual identification of a company, these standards to some extent make a contribution to customer experience during service provision. In some cases the standard of staff outfit goes along with the standard of 'staff appearance' (identified in 5 entities, 17%). This refers to how the staff should look, for example hair length or tattoo visibility. These standards are very similar in terms of objectives and existence conditions for 'staff outfit' standards.

Another standards group is devoted to conversation with customers (8 objects, 27%). These standards are set to ensure that during conversations service staff communicate appropriately and show necessary respect to customers. Another group is 'customer treatment' (7, 23%). These standards regulate some staff behaviour while being in contact with customers. They are mostly about symbols, gestures and courtesy towards customers. Apart from the above-mentioned standard groups a few more are identified: standards of 'cleanliness', standardized 'selected process steps', 'customer service process', 'service sequence', 'telephone call' and 'access to information.' It is important that these standards are very similar to those mentioned in the previous paragraph. In terms of the manners of implementation they are set to the service line as come from outside.

Identified service standards versus Lean Management framework

The idea of the performed empirical investigation is to determine to what extent the standardisation currently practiced in the service industry is consistent with the standardisation typical for the Lean Management approach. The above-mentioned service standard types were deeply analysed in the light of Lean Management methodology. The most common standard, the staff outfit, is not consistent with any Lean methodology components. It does not diminish its importance, but the staff outfit standard does not fit in any way anything that is important in the Lean Management approach. Moreover, as clearly mentioned in the literature section, the Lean approach to standardisation relies upon standards prepared to improve them as a provisional state striving for improvement. The staff outfit standard operates in a different logic. It purpose is to force identical-looking clothes worn by staff in all service spots. The standards of staff appearance present exactly the same function and logic as staff outfit.

Other quite numerous standard groups also have no common points with the Lean Management framework. Conversation with the customer actually sets routines referring to the conditions of the service process, not just the process stream, and it does not bother the productivity of the stream. According to Lean methodology, the most important things happen in the value stream. Lean is focused on eliminating waste from the value stream. The standards of customer treatment also play a supplementary role in the core service process where the value stream is flowing.

Exploring all the recognized standards, the first noticeable similarity to the Lean Management framework is identified in the standard of cleanliness, and similar to it – 'the order'. Both these standards have something in common with technique 5S, popular in Lean Management. 5S is a popular technique of keeping order and cleanliness at workstations by operators (Urban, Mazurek, 2011). The 5S method is partly aimed at people operating

more productively in workstations and partly at building operators' personal engagement. The next three standards groups deal with the value stream, which is inevitably the focus point of Lean Management. These groups are as follow: selected process steps, customer service process, and service sequence. It is clear that these standards cover in their scope the flow of a main service process which is very similar to the Lean value stream. These standards concern some different sequences of the value stream or only selected spheres. The summary of the correspondence of identified service standards with Lean methodology is presented in Table 2. As is summed up, only 11 standards, 18% of all the standards (not entities), are compliant with Lean Management. But this compliance is not exact or complete.

Table 2. Standards' compliance with Lean Management

Standards	Number	Percentage	Lean components
Cleanliness	3	5	5S technique
The order	1	2	
Selected process steps	3	5	Value stream
Customer service process	2	3	
Service sequence	2	3	
Total	11	18	

Source: own studies.

The main idea of Lean with regard to standardisation is to standardize to change the standard. This means that a standard is treated as a temporary solution that should eventually be improved, again and again. Along with this understanding of standardisation goes its bottom-line character. Teams of operators set up standards to eliminate waste and to prevent quality flaws within the value stream. In the Lean approach standards do not come from outside, nor from the top managers, nor from the company's central office, and nor from outer organizations. The operators are responsible for achieving some goals, and they set up, improve and set new standards. All the above-mentioned service standards identified in companies play a noticeably different role. All of them, from the point of view of the line staff, come from outside – from a franchisor, a company's central office, external advisors or top managers. This also applies to the five groups of standards qualified as to some extent being in accordance with the Lean Management framework, presented in Table 2 above.

Conclusions

The research on standardisation is not wide yet, and some stakeholders perceive it as a subordinate tool for getting more work from operators, or even to 'squeeze' them. But this view on standardisation is not appropriate, as Toyota proved that standardisation is an excellent method of capturing the best practical knowledge and to accumulate it and develop it; a standard forms an edge to bounce off to find a better solution. The Lean Management approach is approaching the service industry, bringing many hopes for improving performance and productivity. This study, based on qualitative in-depth studies, tried to confront existing service standards with the Lean Management framework. According to the performed content analysis and a deep understanding of the 61 standards existing in

service companies, there are only two feeble tangent points with the Lean approach. These standards, which to some extent are close to Lean, represent only 18% of all the recognized service standards.

Although some potentially common points were identified, the discovered logic of standardisation is totally different than that practiced in Lean Management. The identified service standardisation serves as a tool for forcing some desired behaviours in distributed service spots. From the point of view of knowledge, this is one direction knowledge flow, from some centres to the service line. These are not symptoms of producing practical operational knowledge in service spots and capturing them in standards. It should be underlined that imposed standards are not well perceived and not easily accepted by executors – employees. The final conclusion is pretty clear: the discovered approach to service standardisation is very far from the approach practiced by Lean methodology. It shows a huge challenge in terms of Lean Management implementation in the service industry.

The conclusion that has emerged from this study is coherent with views recently appearing in the literature. Gupta, Sharma and Sunder (2016) argue that the Lean road to services is still in a nascent stage and needs much research. Suárez-Barraza, Smith and Dahlgaard-Park (2012) and Gupta et al. (2016) also point out the urgent need for Lean Service definitions and clarification of principles. Dos Reis Leite and Ernani Vieira (2015) postulate the identification of best practices and standards for Lean tools (like 5S and process standardisation) referred to a service organization. Standardisation needs to discover its diametrically different face to be adopted in Lean Service transformation in a service organization.

References

Bitner, M.J., Ostrom, A.L., Morgan, F.N. (2008). Service Blueprinting: A practical technique for service innovation. *California Management Review*, *3* (50).

Burgess, N., Radnor, Z. (2013). Evaluating Lean in healthcare. *International Journal of Health Care Quality Assurance*, *3* (26).

dos Reis Leite, H., Ernani Vieira, G. (2015). Lean philosophy and its applications in the service industry: a review of the current knowledge. *Production*, *3* (25).

Fitzsimmons, J.A., Fitzsimmons, M.J. (2008). *Service Management. Operations, Strategy, Information Technology*. New York: McGraw Hill.

Grönroos, C. (2007). *Service Management and Marketing. Customer Management in Service Competition* (3-rd ed.). New York: John Willey & Sons.

Gupta, S., Sharma, M., Sunder, V.M. (2016). Lean services: a systematic review. *International Journal of Productivity and Performance Management*, *8* (65).

Haeckel, S.H., Carbone, L.P., Berry, L.L. (2003). How to Lead the Customer Experience. *Marketing Management*, *1* (12).

Haksever, C., Render, B., Russell, R.S., Murdick, R.G. (1999). *Service Management and Operations* (2-nd ed.). Prentice Hall.

Hino, S. (2006). *Inside the Mind of Toyota*. New York: Productivity Press.

Hunter, J.A. (2011). A study of consumer perception of smiling customer service within the airline industry. *Journal of Transportation Security*, *1* (4).

Jylhä, T., Junnila, S. (2014). The state of value creation in the real-estate sector – lessons from lean thinking. *Property Management*, *1* (32).

Lockwood, A. (1994). Using Service Incidents to Identify Quality Improvement Points. *International Journal of Contemporary Hospitality Management*, *1/2* (6).

Ohno, T. (1988). *The Toyota Production System: Beyond Large Scale Production*. New York: Productivity Press.

Sarkar, D. (2008). *Lean for Service Organizations and Offices*. Milwaukee: ASQ Quality Press.

Suárez-Barraza, M.F., Smith, T., Dahlgaard-Park, S.M. (2012). Lean Service: A literature analysis and classification. *Total Quality Management & Business Excellence*, *3–4* (23).

Urban, W., Mazurek, A. (2011). The human factor in 5S implementation: perspectives from Poland. *Emerald Emerging Markets Case Studies*.

Vargo, S.L., Lusch, R.F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, *1* (68).

Wong, A., Sohal, A. (2003). A critical incident approach to the examination of customer relationship manage-ment in a retail chain: an exploratory study. *Qualitative Market Research: An International Journal*, *4* (6).

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WAYS OF IMPLEMENTING CORPORATE SOCIAL RESPONSIBILITY IDEA IN SHIPPING COMPANIES

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Abstract

Creating a CSR strategy and preparing a sustainability report has become more and more popular among a wide range of branches including the blue economy. The aim of the paper is to identify joint maritime industry initiatives promoting socially responsible shipping companies and to point out areas of interest for Corporate Social Responsibility raised by shipowners. The research question was asked about the identification of possible ways of understanding and implementing sustainable ideas in shipping companies operating in container market. In order to answer that question the multi-case study of container shipowners was prepared. Significant disparities in the approach to CSR are evident. They depend on the specificity of the company, primarily on the size of tonnage at disposal and market presence strategies. Leading shipping companies in the field of CSR are shipowners with significant market shares. They refer to CSR standards, participate in sustainable shipping initiatives, create coherent strategies that skilfully combine environmental, social and business goals.

Introduction

The aim of the paper is to identify joint maritime industry initiatives promoting socially responsible shipping companies and to point out areas of interest for Corporate Social Responsibility (CSR) raised by shipowners. The research question was asked about the identification of similar actions taken by shipowners that can be

considered as typical solutions for these entities. The paper focuses on the activity which is an inseparable part of the main business of shipping companies.

CSR initiatives in the shipping market

CSR is becoming more and more important for entities from various industries, also for those operating in the shipping market. However enterprises do not always implement this idea in an identical way. The nomenclature used is also not uniform. There are several terms which are connected with CSR and very often they are used interchangeably. For instance one can find: environmental responsibility, social responsibility, sustainable development, sustainability, corporate citizenship, green marketing or triple bottom line. Regardless of the term, the intent is to reflect business responsibility for the wider societal good (Crittenden, Crittenden, Ferrell, Ferrell, Pinney, 2011).

The growing importance of the sustainability concept created a need to give it operational character and provide implementation instructions for organizations and enterprises. Such guidance is provided e.g. by International Organization of Standardization (ISO) in ISO 26000: 2010. It declares that implementing its guidance should bring benefits for companies. Also EU insists on implementing CSR approach in companies and convinces them that addressing CSR issues is in their interests. EU defines CSR as "the responsibility of enterprises for their impacts on society" (European Commission, 2011). The core subjects of CSR are: environment, labour practices, human rights, combating corruption, fair operating practices, consumer issues and community involvement (ISO, 2010)

Shipowners rarely provide information on the implementation of CSR strategies based on ISO 26000. When presenting their CSR activities shipping companies often refer to international standards such as UN Global Compact, UN Sustainable Goals or GRI Global Reporting instead of ISO 26000. Among the analysed shipowners, only CMA CGM mentions taking into account the suggestion of ISO 26000 in its activities.

The literature on CSR in shipping is scarce (Yliskylä-Peuralahti, Gritsenko, 2014). Especially there are not many research papers studying CSR as a comprehensive concept applied in shipping. It is easier to find research that focus on particular aspects of sustainable shipping. Most of them concentrate on topics such as air pollution by ships (Psaraftis, Kontovas, 2013), working conditions of seafarers (Lundh, Lützhöft, Rydstedt, Dahlman, 2011), piracy, decision transparency or improving an image of shipping industry (Theotokas, Biassias, 2014). Some issues regarding CSR in shipping can be found also in studies devoted to application of sustainability in sea ports (Gibbs, Rigot-Muller, Morgan, Lalwani, 2014) and in supply chains (Wolf, Seuring, 2010). Good practices and examples presented in literature often go beyond the legislative requirements in force. It creates a link between these ideas and CSR concept.

It is important to remember that company's activity can be identified as CSR-related only when it is based on self-regulations that are more strict than it is required by law. Therefore, in order to confirm that the shipowner's actions in the area of pollution prevention by ships are consistent with CSR, it should be demonstrated that his decisions are more stringent than the minimum required by law. The assessment of the shipowner in this respect is facilitated by the initiatives of several organizations. Such institutions promoting the sustainable development of ports and shipping industry create a number of tools useful for assessing shipowners or individual ships. The most well-known examples of such indicators are shown in Table 1. Each of these tools promotes activities carried out with higher environmental standards than required by law. The most popular is ESI programme (last row in Table 1).

Table 1. Examples of tools for assessing the pro-environmental nature of ships and shipowners

Assessment and certification entity	Tool name	Tool description
Clean Cargo Working Group (CCWG)	CCWG Performance Metrics Tool	The assessment covers shipping companies, shippers and logistic shipowners involved in container shipping by sea in terms of points achieved in 6 categories: CO_2 (1), SO_x and NO_x emissions (2), waste and water management (3), chemicals (4), environmental management (5) and transparency of activities (6). The rated companies are compared to industry standards
Clean Shipping Project	Clean Shipping Index	It assesses both ships and shipping companies. Shipowners enter information about their ships into the database with an online tool. It is possible to compare the results for individual ships or shipowners, and separately for 5 categories: SO_x and PM (1), NO_x (2), CO_2 emissions (3), chemicals and water management (4) and waste management (5). The members of the project are also shippers who can use the index when deciding on choosing the shipowner
RightShip	GHG Emissions Rating	It rates ships for energy efficiency and emissions
Green Award	Green Award Certificate	The ship is awarded a certificate for environmental and safety measures that exceed minimum legislation. Certification must be audited at the shipowner's headquarters and on ships
World Port Climate Initiative	Environmental Ship Index (ESI)	For ships that exceed IMO requirements in the field of emission reduction

Source: Adapted from: Andersson, Brynolf, Lindgren, Wilewska-Bien (2016), Coady, Lister, Strandberg, Ota (2013), Green Award (2017).

Methodology

The analysis of CSR topics of shipping companies was carried out for container shipowners. This is determined by three reasons. The first is high dynamics of growth of seaborne container trade (ISL, 2017). Secondly, container ships are vessels with the highest levels of GHG emissions among all types of ships (IMO, 2015). This contributes to the highest expectations of the public regarding the reduction of air pollutants. The third reason is the structure of this market, which due to the high degree of concentration of entities, shows the symptoms of oligopoly. This structure will grow stronger as the largest container shipowners strengthen their presence in the market. Top five carriers will control nearly 60% of the world's containership fleet by 2021 (Port Technology, 2017). Market concentration is compounded by takeovers and mergers as well as operational alliances, which offer customers a joint shipping service. The large share of the main shipping companies in the container market means that the analysis of the implementation of the CSR concept by the five largest shipowners is also a study of the trends prevailing in this market.

In order to answer the research questions the multi-case study of selected container shipowners was prepared. Interesting part of the methodology is the way the companies for comparison were selected. It was done using a shipowners' ranking which enables to verify if the CSR actions depend on a shipowner's size.The selection of companies for the study is based on the ranking of the 100 largest container shipowners by total TEU capacity published by Alphaliner (Alphaliner, 2017). The first five largest shipowners were compared to those in positions 50–54 and the last five places in the ranking. The comparative analysis is based on information provided by shipowners in reports and on websites as well as articles published in shipping magazines. The content analysis based on company's web pages and sustainability reports is quite popular in the field of CSR research. This methodology can be found in papers analysing other industries and sectors (Liao, Xia, Wu, Zhang, Yeh, 2017).

Popular topics among shipowners in the CSR area

The study was designed to outline similarities and differences in terms of CSR activities realised by selected shipowners. Table 2 provides information on the CSR strategy pursued by analysed companies.

Table 2. CSR actions taken by analysed companies

Alphaliner top 100 position	Shipowner	Total capacity (thousand TEU)	UN Global Compact participant	CSR activities presented on the website	Carbon calculator	ESI participant
	1	2	3	4	5	6
1	MAERSK	3505	Yes	Yes	No	Yes
2	MSC	3059	No	Yes	Yes	Yes
3	CMA CGM	2382	No	Yes	Yes	Yes
4	COSCO	1768	Yes	Yes	Yes	Yes
5	Hapag-Lloyd	1498	No	Yes	Yes	Yes
50	MILAHA	19	No	No	No	No
51	Crowley Liner Services	16	No	Yes	No	No
52	FESCO	16	No	No	No	No
53	Westwood Shipping Lines	16	No	No	No	No
54	Far Shipping	16	No	No	No	No
96	Harbour-Link Group Bhd	5	No	Yes	No	No
97	Imoto Lines	5	No	Yes	No	No
98	Grupo Susa	5	No	No	No	No
99	Admiral Feeder Line	5	No	No	No	No
100	ADNATCO	5	No	No	No	No

Source: own study based on websites of presented companies and: Mediterranean… (2017), CMA CGM (2016), Moller-Maersk (2016), COSCO Shipping (2016), World… (2017), United Nations Global Compact (2017).

The information about shipowners' actions (column 4 in Table 2) were taken into account in one of the three main areas, i.e. environment, employees or community. As a confirmation of implementation of CSR strategy the information about concrete actions was taken into account, not merely general assurances of the importance of these issues in the operation of the company, which are not supported by any examples.

Table 2 indicates that the top five shipowners are more likely to formulate a CSR strategy, participate in international sustainable shipping initiatives and report on their activity in this area. The most detailed reports, Sustainability Reports, are published by Maersk and COSCO. In case of COSCO the content refers to the guidelines proposed by the GRI. The CMA CGM publication is entitled *Code of Ethics*, the Hapag-Lloyd is *Global Code of Ethics*, and the MSC is *Code of Business Conduct*. They are sets of rules of behaviour in the corporation rather than real CSR reports. In any case, the scope of the report covers the entire capital group, not just the container shipowner.

Analysis of sustainability reports and the content of container shipowners' web pages allows to identify the main areas that are most frequently repeated in CSR strategies. Figure 1 presents the ones that relate to the specificity of functioning on the freight markets. Those that are general (such as anti-corruption policy, charity, supporting local communities) and could concern businesses in any other industry are omitted.

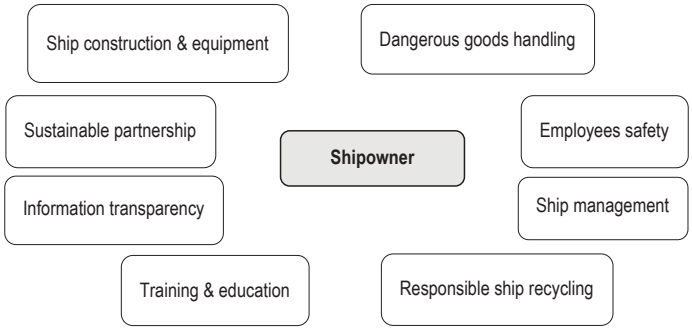

Figure 1. Key areas of interest for shipowners in the field of CSR

Source: own work.

The CSR concept is about integrating environmental and social issues into business, while taking into account stakeholder expectations. However, according to the information published by the shipowners, many of them focus mainly on the issues of conservation of the marine environment and fight against climate change. The information on social involvement is largely limited to the presentation of charity. The issue of identifying and analysing stakeholder expectations is also rarely discussed. Even among the first five largest container shipowners this process is described only by COSCO.

The decision to implement the CSR strategy should be related to a general strategy of the company's presence in the shipping market (Goss, 2008), the scale of its business and relationships within the shipping business group. From this standpoint, several typical categories of shipowners can be distinguished (Table 3).

Table 3. Most typical categories of analysed shipowners according to their size, presence in the container shipping market and attitude toward CSR

Dimension	Category 1	Category 2	Category 3	Category 4
Large market share	Yes	No	No	No
Long term presence in the market	Yes	Yes	Yes	No
CSR formal strategy	Yes	No	No	No
Only few CSR actions	No	Yes	No	No

Source: own work.

The first one is composed of big companies operating within diversified business groups, which often represent several brands. This type of business most often develops and implements a formal CSR strategy, characterized by precisely defined objectives, methods and reporting effects in the form of CSR reports. These companies are the most recognisable by the public, hence their positive image is of great importance. This group has the leading position in Table 1. For further categories the scale of services is definitely smaller and the market share is lower. In the case of small shipowners, CSR approach is not indicated as a priority, and even if it is mentioned, it is more intuitive than described in the documents. Applying or abandoning the implementation of the CSR concept depends to a large extent on their business objectives, i.e. long-term presence on the market or entering the market only for

making quick profits. There are also entities concentrated only on financial aspects of doing business. Their activity on the freight market is closely related to the business cycle in shipping. Their objective is to achieve the highest possible profit in the short term. Such shipowners are not interested in implementing the CSR concept at all.

Conclusions

It is extremely difficult to compare the implementation of a CSR strategy implemented by several companies. This is because CSR activities are undertaken voluntarily, cover many aspects of business operations and the standards only provide general guidelines and recommendations to facilitate their application. Specific actions must already be individually tailored to the industry and specificity of the business.

It is essential to carefully implement CSR principles for core business. For the shipowner this activity is sea transport, and the basic work tool – a ship. The article identifies CSR activities typical of shipping shipowners as: sustainable ship management and integrating sea transport into the "green supply chain" as well as ship design with the main aim of minimizing pollution, increasing energy efficiency, ensuring ship and crew safety. In addition, an important area of implementation and one of the biggest challenges faced by the shipping industry is the application of CSR throughout the whole ship life cycle - during shipbuilding process, fleet management and ship recycling.

Significant disparities in the approach to CSR are evident. They depend on the specificity of the company, primarily on the size of tonnage at disposal and market presence strategies. Leading shipping companies in the field of CSR are shipowners with significant market shares. They act according to CSR standards, participate in sustainable shipping initiatives, create coherent strategies that skilfully combine environmental, social and business goals, publish CSR reports and, above all, have "green" ships.

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References

Alphaliner (2017). Retrieved from: https://alphaliner.axsmarine.com/PublicTop100 (20.05.2017).

Andersson, K., Brynolf, S., Lindgren, J., Wilewska-Bien, M. (2016). *Shipping and the Environment: Improving Environmental Performance in Marine Transportation*. Berlin: Springer.

CMA CGM (2016). *Code of Ethics CMA CGM GROUP*. Retrieved from: http://www.cma-cgm.com/the-group/corporate-social-responsibility/environment (8.07.2017).

Coady, L., Lister, J., Strandberg, C., Ota, Y. (2013). *The Role of Corporate Social Responsibility in the International Shipping Sector*. A Phase 2 Research Paper. The Northern European Symposium on CSR Shipping. Copenhagen.

COSCO Shipping (2016). *COSCO Shipping Sustainability Report 2016*.

Crittenden, V., Crittenden, W., Ferrell, L., Ferrell, O., Pinney, C. (2011). Market-oriented sustainability: a conceptual framework and propositions. *Journal of the Academy of Marketing Science*, *39*, 71–85.

European Commission (2011). A Renewed EU strategy 2011–2014 for Corporate Social Responsibility. COM (2011) 681 final, Brussels.

Gibbs, D., Rigot-Muller, P., Morgan, J., Lalwani C. (2014). The role of seaports in end-to-end maritime transport chain emissions. *Energy Policy*, *64*, 337–348.

Goss, R. (2008). Social Responsibility in shipping. *Marine Policy*, *32*, 142–146.

Green Award (2017). Retrieved from: www. greenaward.org (2.06.2017).

IMO (2015). *Third IMO Greenhouse Gas Study 2014*. London.

ISL (2017). *Shipping Statistics and Market Review*, *5–6*. Bremen.

ISO (2010). ISO 26000:2010. Guidance on social responsibility.

Liao, P., Xia, N., Wu, C., Zhang, X., Yeh, J. (2017). Communicating the corporate social responsibility (CSR) of international contractors: Content analysis of CSR reporting. *Journal of Cleaner Production*, *156*, 327–336.

Lundh, M., Lützhöft, M., Rydstedt, L., Dahlman, J. (2011). Working conditions in the engine department – A qualitative study among engine room personnel on board Swedish merchant ships. *Applied Ergonomics*, *2* (42), 384–390.

Mediterranean Shipping Company (2016). MSC Code of Business Conduct. Retrieved from: https://www.msc.com/grc/sustainability/governance (1.07.2017).

Moller-Maersk, A.P. (2016). *Sustainability Report 2016*. Retrieved from: http://www.maersk.com/en/the-maersk-group/sustainability (10.07.2017).

Port Technology (2017). Retrieved from: https://www.porttechnology.org/news/top_five_carriers_to _control_over_half_of_container_shipping_by_2021 (21.06.2017).

Psaraftis, H., Kontovas, C. (2013). Speed Models for Energy – Efficient Maritime Transportation: A Taxonomy and Survey. *Transportation Research Part C*, *26*, 331–351.

Theotokas, I., Bissias, I. (2014). A Touch of Salt: The Image of Shipping in Newspapers of the UK. *WMU Journal of Maritime Affairs*, *2* (13), 177–190.

United Nations Global Compact (2017). Retrieved from: https://www.unglobalcompact.org/what-is-gc/participants (18.06.2017).

Wolf, C., Seuring, S. (2010). Environmental impacts as buying criteria for third party logistical services. *International Journal of Physical Distribution & Logistics Management*, *1* (40), 84–102.

World Ports Sustanability Program (2017). Retrieved from: http://esi.wpci.nl/Public/Ships (3.07.2017).

Yliskylä-Peuralahti, J., Gritsenko, D. (2014). Binding rules or voluntary actions? A conceptual framework for CSR in shipping. *WMU Journal of Maritime Affairs*, *2* (13), 251–268.

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TRANSPORTATION PROCESS OPTIMIZATION – SELECTED EXAMPLE

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Abstract

Due to the dynamic world growth, people more often need to choosetheoptimal mean of transport. To do it properly, experts correlate many transport offers and compare such features as: time of transit, costs, capacity. But it should be mentioned, that process of collecting, comparing and studying the data is a time consuming process. The article presents how the AHP method could be used as an aid to choose the optimal mean of transport. The method is widely used not only because of high effectiveness of resolving complex problems, but also because it is simple and the results are transparent and easy to interpret. Several significant parameters were chosen to conduct theanalysis.

Introduction

The AHP method was developed and described by Saaty. It is mainly used as an aid tool during complex decision making process. During that process, the user can select physical objects and states that representthe project or other variants, that could lead to the certain states (quality, risk). What is more, diagnostic and comparative evaluation of examined objects is possible by using the AHP method (Downarowicz, Krause, Sikorski,

Stachowski, 2000, p. 7). The assumption is, that the AHP method would make it easier to choose optimum variant inthemulticriterial optimizing, especially because of its reduction to theseries of comparison in pairs (Emrouznejad, Marra, 2017, p. 6653). The method has many advantages, but the fact that both measurable and nonmeasurable features can be used inthe analysis should be considered as the most crucial issue (Mu, Pereyra-Rojas, 2017). The aim of the article is to show possible usage of the AHP method in transportation problem.

Literature review

Because of thecomparison in pairs of all elements with each other, standard evaluation scales are insufficient. To make the analysis more complete, the 9-point grade scale was introduced. Comparing two elements with each other will show which is more significant and how much (Przybyło, Krężołek, 2017).

When we want to comparethe elements that are nonmeasurable, the linguistic approach should be applied. In that approach, the linguistic variable takes as its value the verbal definition. In order to evaluatethe elements on different levels in the analyzed structure, the comparison matrix was created (Cabała, 2010, pp. 5–23), and its degree is equal to thenumber of compared elements (Mu, Pereyra-Rojas, 2017).

$$A = \begin{bmatrix} a_{11} = 1 & a_{12} & \dots & a_{1n} \\ a_{21} = \dfrac{1}{a_{12}} & 1 & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} = \dfrac{1}{a_{1n}} & 1 & \dots & a_{mn} \end{bmatrix} \tag{1}$$

where: A – square matrix where aij denote the elements of the matrix (i, j = 1, 2, …, n); the matrix is called square if:[1]

a) a_{ij} = z, then $a_{ji} = \frac{1}{z}$, $z \neq 0$

b) criteria C_i is equiponderant to C_j, then a_{ij} = 1 ia_{ji} = 1, and a_{ij} = 1 for $i = j$.

Wherewith matrix A also fulfill the following property: $a_{ij} > 0, a_{ij} = \frac{1}{a_{ji}} \forall$ i, j = 1, 2, …, n.

All the elements of the model are ordered according to validity ofthe priority vectors $W = w_1, ..., w_n$. Firstly, to calculate the priority vector W, it is necessary to perform a matrix A normalization (the matrix B is created), by dividing each element of the matrix by the sum of theelements in column, in which it is located (Mu, Pereyra-Rojas, 2017):

$$b_{ij} = \frac{a_{ij}}{\sum_{i=1}^{n} a_{ij}} \tag{2}$$

Next, average value in every row of the new matrix should be defined. That value is the element $w_i$priority vector W:

[1] http://www.dii.unisi.it/~mocenni/Note_AHP.pdf.

$$w_i = \frac{\sum_{j=1}^{n} b_{ij}}{n} \tag{3}$$

where *i*, *j* = 1, …, *n wherein* $\sum_{i=1}^{n} w_i = 1$. In case of priority vectors analyzed criteria we use k_i, while forthe priority vector of theith element according to thejth criteria, we use o_{ij}.

Value of the AHP rate, denoted as h_i, is determined based on the dependence:

$$h_i = \sum_{i=1}^{n} (k_i o_{ij}) \tag{4}$$

where k_i is the value of the priority vector element for theith criteria (wage of theith criterion), where as o_{ij} is an value of the priority vector element for thejth object in terms of theith criterion, wherein $\sum_{i=1}^{n} h_i = 1$.

Therefore, thecriteria and the variants comparison is made by defining superiority of one element over the other. The experts usually make that observation and because of that it is rather subjective opinion. Even an experienced expert could make a mistake while studying data, what is most often caused by the lack of consequences duringthe evaluation (Mu, Pereyra-Rojas, 2017).

According to E. Mu and M. Pereyra-Rojas, checking the credibility of results in the AHP method should be made by calculating the consistency ratio from theunder mentioned formula:

$$CR = \frac{CI}{RI} 100\% \tag{5}$$

where:

RI – Random Consistency Index, gaining values from 0 to 1.57 (Table 1),

CI – Consistency Index, we define from dependence:

$$CI = \frac{(\lambda_{max} - n)}{(n-1)} \tag{6}$$

where λ_{max} is maximum value from the matrix, always higher or equal to rank of the matrix *n*.

Table 1. Random Consistency Index *RI*

Matrix order number	*n*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RI	*RI*	0.00	0.00	0.58	0.90	1.12	1.24	1..32	1.41	1.45	1.49	1.51	1.54	1.56	1.57

Source: Mu, Pereyra-Rojas (2017).

Maximum estimated value of the matrix λ_{max} can be calculated asthe amount of sums of theproducts averaged in row normalized values of wages and sum of columns referring each criteria, what can be written as (Ginda, 2007):

$$\lambda_{\max} = \sum_{i=1}^{n} \left(w_i \sum_{j=1}^{n} a_{ij} \right) \tag{6}$$

The value of the consistency ratio *CR* should not exceed 10%, because it will mean that the evaluation process must be repeated (Mu, Pereyra-Rojas, 2017).

Method

Using above information, the authors decided to use the AHP method to conduct thesimulation of thedecision making process, where theoptimal mean of transport has to be chosen. There are five criteria in analysis: speed, transport availability, capacity, transport costs, exploitation reliability. What is more, there are 6 different means of transport taken into account: heavy-loaded truck, truck, train, ship, ferry, airplane.

First part of the analysis is to make thecriteria ranking, what is shown in Table 2. Secondly, it is necessary to normalize the criteria ranking, what is presented in 3th Table.

Table 2. Criteria ranking

	Speed	Transport availability	Capacity	Transport costs	Exploitation reliability
Speed	1.00	0.33	0.14	5.00	0.11
Transport availability	3.00	1.00	0.20	5.00	0.11
Capacity	7.00	5.00	1.00	7.00	0.11
Transport costs	0.20	0.20	0.14	1.00	0.11
Exploitation reliability	9.00	9.00	9.00	9.00	1.00
Sum	20.20	15.53	10.49	27.00	1.44

Source: own work.

Table 3. Normalized criteria ranking

	Speed	Transport availability	Capacity	Transport costs	Exploitation reliability
Speed	0.05	0.02	0.01	0.19	0.08
Transport availability	0.15	0.06	0.02	0.19	0.08
Capacity	0.35	0.32	0.10	0.26	0.08
Transport costs	0.01	0.01	0.01	0.04	0.08
Exploitation reliability	0.45	0.58	0.86	0.33	0.69
Sum	1.00	1.00	1.00	1.00	1.00

Source: own work.

Calculations in that method are rather complex but repetitive and because of that the authors decided to omit some of it in further part of the article. Next part of the analysis is the alternative ranking of all the alternatives in all the criteria. Table 4. shows example of the alternatives ranking according tothe exploitation reliability criteria.

In that case, *CR* = 0.04. In other criteria, the *CR* is:

- speed – 0.09,
- transport availability – 0,05,

– capacity – 0.08,
– transport costs – 0.06.

That values show, that the CR is optimum in every case. After building the pairwise comparison matrices, the decision maker could point out thescore vectors, that are shown in Table 5.

Table 4. Ranking ofthe alternatives according to the exploitation reliability criteria

Exploitation reliability	Truck	Heavy-loaded truck	Train	Ship	Ferry	Airplane
Truck	1	0.33	0.11	0.20	0.20	0.14
Heavy-loaded truck	3	1.00	0.14	0.33	0.33	0.20
Train	9	7.00	1.00	5.00	5.00	3.00
Ship	5	3.00	0.20	1.00	1.00	0.33
Ferry	5	3.00	0.20	1.00	1.00	0.33
Airplane	7	5.00	0.33	3.00	3.00	1.00
Sum	30	19.33	1.99	10.53	10.53	5.01

Source: own work.

Table 5. Score vectors in each criteria

	Speed	Transport availability	Capacity	Transport costs	Exploitation reliability
Truck	0.11	0.32	0.03	0.05	0.03
Heavy-loaded truck	0.11	0.32	0.05	0.05	0.05
Train	0.18	0.20	0.09	0.03	0.45
Ship	0.03	0.06	0.35	0.18	0.11
Ferry	0.03	0.06	0.35	0.18	0.11
Airplane	0.53	0.03	0.14	0.51	0.24

Source: own work.

Next, the score vectors should be multiply by the priority vector and the sum in rows. The results are shown in Table 6.

Table 6. Overall priority for variants

	Priority vectors
Truck	0.06
Heavy-loaded truck	0.08
Train	0.31
Ship	0.16
Ferry	0.16
Airplane	0.23

Source: own work.

According to the calculations and the initial assumptions, optimal mean of transport in that case is train.

Conclusions

Taking everything into consideration, the AHP method is one of the mathematical method that support the decision-making process in complex and multicriterial problems (Lu, Qin, Jin, 2017). That method is an aid, especially for those who are not enough experienced in some fields. The AHP method grant an optimum solution to be chosen fromthe different alternatives. Among many advantages, the most valuable is that duringthe decision-making process the problem can be seen from different perspectives and complex problem could be reduced to thesimple mathematical equations. Thanks to that, taken decision is not biased or influenced by theone issue.

References

Cabała, P. (2010). Using the analytic hierarchy process in evaluating decision alternatives. *Operations Research and Decisions*, *1*, 5–23.

Downarowicz, O., Krause, J., Sikorski, M., Stachowski, W. (2000). *Zastosowanie metody AHP do oceny i sterowania poziomem bezpieczeństwa złożonego obiektu technicznego*. Gdańsk.

Emrouznejad, A., Marra, M. (2017). The state of the art development of AHP (1979–2017): a literature review with a social network analysis. International Journal of Production Research, *55*, 6653–6675.

Ginda, G. (2007). *Forecasting based on multiatribute analysis. Forecasting and simulations*. Politechnika Opolska. Retrieved from: http://www.bopis.po.opole.pl/pis06_win.pdf (2.08.2017).

http://www.dii.unisi.it/~mocenni/Note_AHP.pdf.

Lu, Z.Y., Qin, F.T., Jin, Y.C. (2017). Study on the Algorithm of Judgment Matrix in Analytic Hierarchy Process. International Conference on Cloud Technology and Communication Engineering. Journal of Physics Conference Series, *910*.

Mu, E., Pereyra-Rojas, M. (2017). Practical Decision Making, Chapter 2: Understanding the analytic hierarchy process. *SpringerBriefs in Operations Research*.

Przybyło, W., Krężołek, S. (2017). *Zastosowania AHP w budownictwie*. Retrieved from: www.fema.pl/~mit/PUBLIKACJE_WLASNE/doc/ahpwbsk-olsztyn.doc (30.07.2017).

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THE ROLE OF IMPORT FOR KIBS INTENSITY: A COMPARATIVE ANALYSIS OF EUROPEAN UNION COUNTRIES

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Abstract

The aim of this paper is to study the role of import for the growth of KIBS intensity in the economy. The study covers the EU countries, making it possible to carry out a comparative analysis between countries, in particular between the EU-15 and the EU-12. The study is based on the data from the World Input-Output Database (WIOD). Owing to the availability of relevant data, the period analysed covers the years 1995–2011.

The study demonstrates that KIBS intensity is higher in the more developed EU countries, and KIBS are mainly delivered from domestic markets. Exceptions include Ireland and Luxembourg, distinguished by the highest and rapidly growing KIBS intensity (satisfied mainly by import), which is accompanied by their strongest KIBS export performance. In the analysed period, the importance of imported KIBS increased (mainly in the EU-15), but to a much lesser degree than with respect to manufacturing products. The role of imported KIBS was higher in the EU-12 than the EU-15 (with a trend to decrease these disparities), as well as in smaller economies.

Introduction

The development of knowledge-based economy, the information and communications technology (ICT) revolution, and increased competition on markets have resulted in the need to reorganize production processes in enterprises so that they can effectively exploit the intellectual potential of more educated workers, supported by ICTs and automation (Bhagwati, 1984; Jones, Kierzkowski, 1990; Motohashi, 1997; Fixler, Siegel, 1999; Baldwin,

2006, 2014). These changes have led to (1) the growing fragmentation of production; and (2) the growing demand for business services, in particular those related to new technologies and knowledge, which are called 'knowledge-intensive business services' (KIBS).

The existing literature demonstrates that companies using KIBS improve their competitiveness (a review of the literature in this field can be found in Wyszkowska-Kuna, 2016), and the level of intermediate consumption of KIBS within a domestic economy improves the competitiveness of its KIBS sector (Wyszkowska-Kuna, 2016, 2017). The goal of this paper is to examine KIBS intensity and the role of import in delivering KIBS to EU companies.

The study also tries to answer the question regarding the impact of market size and the level of economic development on KIBS trade. In the light of international trade theory, KIBS imports should play a more important role in smaller economies (as they tend to be more trade-dependent than larger ones), as well as in less developed countries (as they tend to be worse endowed with knowledge than more developed ones). One should note, however, that trade in intermediates depends less on a country's market size, which represents a chance for smaller and emerging economies (Miroudot, Lanz, Ragoussis, 2009).

Global sourcing of KIBS

The dynamic development of global sourcing is linked to the ICT revolution. The rapidly declining costs of communication and coordination have made it possible to perform most manufacturing stages in different locations (Baldwin, 2006, 2014). Most recently, the ICT revolution has increased significantly the tradability of many services, and then the process has spread from factories to offices (Baldwin, Lopez-Gonzalez, 2015). This, in turn, has stimulated the development of international trade in intermediates with respect to both manufacturing goods and services.

Over the recent years the range of business services that have been subject to global sourcing has not only grown, but has also changed its structure. The growing demand for specialized business services has reduced the importance of simple, routine and standardized tasks, while increasing the role of processes with higher value added (Lewin, Massini, Peeters, 2009). It should be noted, however, that the possibility of providing services from a distance is primarily applicable to highly standardized services (Rybiński, 2008). Tailor-made services, produced in interaction with clients – and a large part of KIBS can be considered as such – require direct contact between service suppliers and recipients. In this case, international production through foreign direct investment seems to be a better way of internationalisation. On the other hand, the technological progress in ICTs is constantly creating better and cheaper communication between service providers and their clients, which together with the ease of travel should have a positive impact on the possibility of distant deliveries, including with respect to KIBS. As a result, the issue becomes of the extent to which they are provided by companies operating on domestic markets, and the extent to which they are traded internationally.

Data and research methodology

The study is based on input-output tables from the WIOD database (*National Input-Output*..., 2013) showing the structure of domestic and imported intermediate inputs in each of the EU countries. To compare the results for groups known as the EU-15 and EU-12, weighted averages for them are calculated. Data showing the structure of domestic and imported intermediate inputs is available for divisions according to NACE Rev. 1.1 for the period

1995–2011. In the light of available data, KIBS can be defined as comprising 'Renting of Machinery & Equipment and Other Business Activities' (divisions 71–74).

Two main indicators are used in the study. The first indicator examines the role of import in providing EU companies with KIBS input, and it takes the form of the share of imported KIBS input in total (domestic and imported) KIBS input (i.e. $\frac{\sum_j KIBS^{Im}_{jit}}{\sum_j KIBS^{T}_{jit}}$, where j is the industry, *i* the country, *t* time, *Im* imported, and *T* total). The second indicator, in the form of the ratio of total or imported KIBS input and GDP (i.e. $\frac{\sum_j KIBS^{D}_{jit} + \sum_j KIBS^{Im}_{jit}}{\sum_j GDP_{jit}}$ and $\frac{\sum_j KIBS^{Im}_{jit}}{\sum_j GDP_{jit}}$), is used to examine KIBS intensity in the economy (Falk, Pen, 2011) – by subtracting the value of imported from total KIBS intensity one can obtain the value of domestic KIBS intensity. Additionally, the second index is standardised by population (i.e. $\frac{\sum_j KIBS^{D}_{jit} + \sum_j KIBS^{Im}_{jit}}{POP_{it}}$ and $\frac{\sum_j KIBS^{Im}_{jit}}{POP_{it}}$), as in the sample composed of countries being at different levels of economic development, the number of population should better control for size effects than the value of GDP.

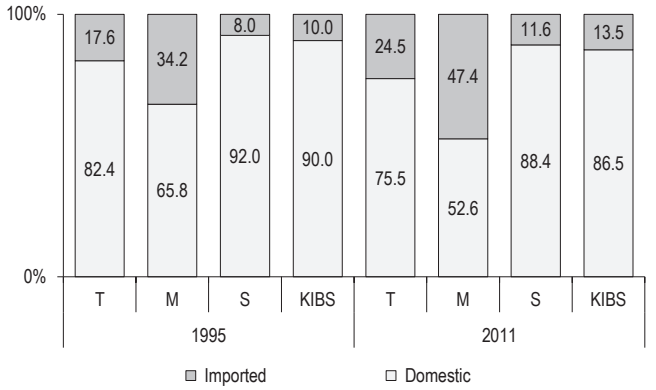
In order to characterize countries with different imported KIBS intensities, the indicators measuring the role of (1) KIBS exports (i.e. $\frac{EXP_{KIBSit}}{\sum_j EXP_{jit}}$ – the share of KIBS exports in total exports; $\frac{EXP_{KIBSit}}{POP_{it}}$ – KIBS exports per capita); and (2) foreign controlled enterprises (FCEs) in KIBS trade (i.e. $\frac{EXP^{FCE}_{KIBSit}}{EXP^{T}_{KIBSit}}$ and $\frac{IMP^{FCE}_{KIBSit}}{IMP^{T}_{KIBSit}}$, where *T* means total enterprises) are included in the analysis.

Empirical study

Figure 1 shows the EU-27 average structure of KIBS input, taking into account the share of domestic and imported KIBS inputs, as compared with a similar structure for: a) services input; b) manufacturing input; and c) total intermediate inputs. Import plays much a more important role in delivering manufacturing input than services input to EU companies. In 1995, 34% of manufacturing input and only 8% of services input came from import, and in 2011 these disparities were further increased.

While, the growing role of import is visible with respect to both manufacturing and services inputs (including KIBS), the growth was significantly stronger in the case of manufacturing (13 percentage points (pp) compared to 3 pp for services). As a result, in 2011 on average almost half of manufacturing input (ranging from 87.6% in Luxembourg to 31.8% in Italy) came from import, while only 11% of services input (ranging from 60.7% in Luxembourg to 6.5% in France) came from import. The importance of import was slightly higher with respect to KIBS input in comparison to overall services input, and also showed an upward tendency.

In Table 1 the values of indicators measuring KIBS intensity and the role of imported KIBS input in the EU countries in 2011, as well as their changes between 1995 and 2011, are presented.



T – in total economy; M – in the manufacturing sector; S – in the service sector; KIBS – in the KIBS sub-sector.

Figure 1. Imported and domestic KIBS input in the EU countries[1] in 1995 and 2011

Source: own calculations based on data derived from: *National Input-Output...* (2013).

Table 1. KIBS input in the EU countries

Country	KIBS input/GDP				KIBS input per capita				Imported KIBS input/ total KIBS input	
	total	IMP	total	IMP	total	IMP	total	IMP		
	2011 (%)		1995–2011* (pp)		2011 (mln of US$)		1995–2011* (in mln of US$)		2011 (%)	1995–2011* (pp)
1	2	3	4	5	6	7	8	9	10	11
AUT	6.5	1.1	2.1	–0.2	6.2	1.0	4.1	0.4	16.4	–12.8
BEL	10.5	1.9	2.9	0.9	10.5	1.9	6.3	1.3	17.8	4.2
DNK	8.6	1.2	4.0	1.0	9.3	1.3	6.6	1.2	14.2	9.0
FIN	7.1	2.4	3.1	1.3	7.0	2.3	5.1	1.8	33.3	5.2
FRA	10.7	0.7	1.5	0.3	8.3	0.5	4.1	0.3	6.6	2.0
DEU	8.4	0.5	1.7	0.3	7.0	0.4	3.5	0.3	6.2	3.3
GBR	10.7	1.0	5.1	0.4	7.4	0.7	5.3	0.4	9.0	–1.9
GRC	3.6	0.4	–0.1	0.3	1.4	0.2	0.7	0.1	10.8	7.7
IRL	15.1	11.5	9.1	8.2	15.4	11.8	13.2	10.5	76.3	21.0
ITA	7.2	0.6	2.1	0.3	5.2	0.4	3.3	0.3	8.2	2.3
LUX	11.0	6.7	4.6	3.7	33.9	20.7	27.9	17.8	61.0	13.8
NLD	8.9	3.4	1.0	0.5	8.9	3.4	4.9	2.0	38.4	2.2
PRT	6.6	0.7	1.6	–0.1	2.7	0.3	1.7	0.1	10.0	–5.7
ESP	5.6	1.0	1.7	0.6	3.5	0.6	2.4	0.5	17.9	6.6
SWE	9.1	2.3	3.4	1.0	9.9	2.5	6.9	1.8	25.2	2.9
BGR	1.9	0.5	0.8	0.2	0.3	0.1	0.3	0.1	25.9	1.9
CYP	4.6	0.3	1.2	0.0	2.1	0.1	1.4	0.1	6.3	–3.7
CZE	6.9	1.4	2.8	0.4	3.5	0.7	2.9	0.6	20.7	–4.1
EST	7.1	1.3	3.7	0.4	2.3	0.4	2.1	0.4	18.1	–9.3
HUN	6.6	2.5	–0.1	–0.2	2.1	0.8	1.5	0.6	38.1	–2.1
LVA	6.2	0.4	4.3	–0.2	1.7	0.1	1.6	0.1	6.7	–24.3

[1] Weighted averages, with weights assigned based on each country's share in the EU-27's GDP.

1	2	3	4	5	6	7	8	9	10	11
LTU	3.5	0.3	2.5	0.1	0.8	0.1	0.8	0.1	9.1	–11.6
MLT	7.0	2.2	3.3	0.7	3.0	1.0	2.3	0.7	31.8	–9.0
POL	4.2	0.9	1.9	0.7	1.2	0.2	1.0	0.2	21.2	12.2
ROU	4.3	0.5	2.8	0.1	0.8	0.1	0.7	0.1	12.2	–12.6
SVK	5.2	0.8	2.7	–0.1	2.1	0.3	1.9	0.3	15.8	–19.4
SVN	7.2	1.0	1.9	0.2	3.5	0.5	2.4	0.3	14.3	–0.2
EU-15**	8.8	1.2	2.4	0.6	7.1	1.1	4.2	0.8	12.9	3.3
EU-12**	5.2	1.0	1.9	0.3	1.7	0.4	1.4	0.3	20.3	–0.1

* Change in the period 1995–2011.

** Weighted averages, with weights assigned based on each country's share in the EU-15's; and EU-12's GDP respectively (all values in current prices, US dollars).

Source: own calculations based on data derived from: the source as in Figure 1; *National accounts*... (2017).

In 2011, the highest KIBS intensity was recorded in Ireland (15.1%) and Luxembourg (11%).

KIBS intensities increased in almost all countries, and they generally reached higher values in countries with higher GDP per capita, i.e. in the EU-15 than the EU-12, as well as in the higher-income countries within both groups. A positive correlation between KIBS intensity and GDP per capita occurred with respect to both imported and domestic KIBS inputs, and it was stronger in the case of imported KIBS input (the Pearson's correlation coefficient achieved the values of 0.5 and 0.3, respectively). The analysis based on KIBS input per capita shows even larger disparities between the more and less developed EU countries. Generally, it is not evident that a relatively low level of domestic KIBS intensity was compensated for by a relatively higher level of imported KIBS intensity. Excluding the cases of Ireland and Luxembourg, this is apparent only in Finland and Hungary. Bulgaria, followed by Lithuania, Poland and Romania, recorded the lowest domestic and imported KIBS intensity.

While taking into account a relative importance of imported KIBS, it was also usually higher in countries with higher incomes and the resulting higher KIBS intensities. The situation was different in the largest, high-income EU-15 countries, where relatively high total KIBS intensities were accompanied by the lowest shares of imported KIBS input in total KIBS input. The average importance of KIBS imports was significantly higher for EU-12 than EU-15. One should note, however, that the EU-15's weighted average is underestimated because of very low shares in the largest EU countries, whereas in this group there are also a few smaller economies with the highest reliance on KIBS imports (Ireland, Luxembourg, Netherlands, Finland). Thus, in reality the disparities between these two groups are less significant. In the EU-12 the relationship between market size and the role of imported KIBS was less apparent than in the EU-15.

Most of the EU-12 countries experienced a decrease in the share of imported KIBS input in total KIBS input, with the most significant drop in Latvia and Slovakia. In the EU-15 the trend was generally reversed, and the strongest increase, much higher than in other countries, took place in Ireland (21 pp). A relatively high growth is also visible in Luxembourg (13.8 pp), Greece (7.7 pp) and Spain (6.6 pp), as well as in Poland (12.2 pp). In 2011 the share of imported KIBS input in total KIBS input ranged from 38% in the Netherlands to 6% in Germany. Ireland and Luxembourg clearly stood out among the EU countries, as imported KIBS input was higher than the domestic one, with a high upward trend – as a result in 2011 in Ireland 76% of KIBS input and in Luxembourg 61% came from import (in general, these two countries were distinguished by a relatively high importance of imported service input).

The values of indicators presented in Tables 1 and 2 show that the countries with a relatively high importance of imported KIBS usually also enjoyed a relatively high importance of KIBS exports (the Pearson's correlation coefficient for imported KIBS input per capita and KIBS exports per capita amounted to 0.8), and the highest values of KIBS exports per capita, much higher than in other countries, were achieved by Ireland and Luxembourg. KIBS exports played a more important role in the EU-15 than the EU-12, and the disparities between them tend to increase. One should note, however, that in most cases a large part of KIBS trade was carried out by FCEs, e.g. in Ireland they accounted for 61% of KIBS exports and 56% of KIBS imports. The importance of FCEs in KIBS trade was significantly higher in the EU-12 than the EU-15, with their highest share in Romania.

Table 2. KIBS exports and imports

Country	KIBS exports/total exports		KIBS exports per capita (mln of US$)		KIBS exports by FCEs*	KIBS imports by FCEs*
	2011 (%)	1995–2011** (pp)	2011	1995–2011**	2011 (%)	
AUT	6.6	–2.2	1.7	0.9	6.4	14.0
BEL	8.0	2.9	2.7	1.8	19.2	18.3
DNK	5.1	3.1	1.5	1.2	25.6	66.9
FIN	9.4	4.9	1.8	1.4	20.6	62.4
FRA	5.9	1.0	0.6	0.4	25.7	28.1
DEU	3.9	1.4	0.8	0.6	22.5	24.1
GBR	12.1	5.3	1.3	1.0	30.1	49.3
GRC	3.7	1.8	0.1	0.1	0.0	0.0
IRL	17.1	12.9	8.0	7.4	60.5	55.9
ITA	4.0	1.3	0.4	0.3	24.2	38.9
LUX	6.2	3.0	10.9	9.3	–	–
NLD	9.3	2.5	3.0	2.0	48.5	42.6
PRT	4.8	2.1	0.3	0.2	4.5	32.8
ESP	8.2	4.3	0.7	0.6	–	–
SWE	10.8	5.6	2.8	2.3	36.3	–
BGR	0.9	0.4	0.03	0.03	48.8	74.4
CYP	3.6	1.6	0.2	0.2	–	–
CZE	3.5	–2.7	0.6	0.4	–	0.1
EST	6.2	3.0	0.5	0.5	21.4	48.3
HUN	4.9	–1.7	0.6	0.5	39.4	49.0
LVA	3.5	–1.7	0.2	0.1	36.6	35.5
LTU	1.6	0.3	0.1	0.1	12.7	57.6
MLT	9.6	5.3	1.3	1.0	4.7	14.2
POL	3.4	2.5	0.2	0.2	42.0	54.8
ROU	6.6	3.8	0.2	0.2	89.1	64.3
SVK	3.3	–0.5	0.4	0.3	49.7	55.2
SVN	3.2	0.8	0.4	0.3	–	–
EU-15***	6.9	2.7	1.2	0.9	26.0****	34.1
EU-12***	3.9	0.9	0.3	0.3	48.5****	46.4

* KIBS exports/KIBS imports by FCEs as % total KIBS exports/total KIBS imports. KIBS defined as comprising 'Professional, scientific and technical activities', and 'Information and communication'.
** Change in the period 1995–2011.
*** Weighted averages, with weights assigned based on each country's share in the EU-15's; and EU-12's GDP respectively (all values in current prices, US dollars).
**** EU-13 (without LUX and ESP), EU-9 (without CYP, CZE and SVN).

Source: own calculations based on data derived from: the source as in Table 1; and *Trade...* (2017).

Conclusions

Based on the study carried out in this paper a few conclusions can be formulated:

1. The EU-12 appeared to be more dependent on KIBS imports, which is in line with the lower-income countries' poorer endowment in knowledge. The EU-15's reliance on KIBS imports was determined by market size, whereas in the EU-12 this tendency was less obvious. As far as KIBS intensity is concerned (both domestic and imported), it was positively correlated with the level of economic development. A relatively higher importance of imported KIBS was usually accompanied by a relatively higher importance of KIBS exports, in large part attributed to FCEs. The EU-12 countries decreased their reliance on KIBS imports (in a result of their rapid economic and service sectors' development), whereas in the EU-15 the trend was reversed.
2. In most countries, KIBS were mainly delivered by companies operating on domestic markets. The growing role of import in providing KIBS is visible (the growth was a bit higher than with respect to total services), but this tendency was rather weak when compared with the growing importance of manufacturing intermediate import. This leads to the conclusion that there is still a need for direct proximity between service providers and customers in delivering most services, including KIBS.
3. Ireland and Luxembourg stood out among the EU countries with their highest KIBS intensities and growth of KIBS import, as well as the domination of imported over domestic KIBS inputs, accompanied by the highest and rapidly growing importance of KIBS exports. Both countries are attractive locations for transnational corporations, which are involved in numerous business relationships with their subsidiaries, co-operatives and customers located throughout the world, which in turn stimulates KIBS trade in these countries.[2]
4. The findings of the study are subject to some limitations. First, the studies on international trade in intermediates should be based on data from input-output tables, and the creation of the WIOD databases gave such an opportunity. One should note, however, that the WIOD 2013 Release is based on NACE Rev. 1.1 and covers a limited period. Its new release is under construction now, and it may open up some new opportunities for continuing research in this field based on NACE Rev. 2 and over a longer period of time. Second, KIBS input is embodied in the values of other products being traded internationally, and thus the calculation of KIBS content in international trade should be the subject of a separate study. Third, while analyzing KIBS trade, data on global sourcing are required, as its large part is carried out by transnational corporations, which hides a real export potential and import needs of different countries. Therefore, it is recommended that international organizations (e.g. Eurostat, WTO) should undertake some actions aimed at collecting the data on global sourcing of services.

[2] Luxembourg is recognized as a tax haven, and characterized by very favorable regulations, political stability, financial security and its location in the center of Europe (Mainelli, Yeandle, 2009). Ireland is not officially recognized as a tax heaven, but it has the features of a tax heaven and provides prolific tax loopholes for many large service multinationals (Stewart, 2014), as well as it is an English-speaking country.

References

Baldwin, R.E. (2006). *Globalisation: The Great Unbundling(s).* Retrieved from: http://appli8.hec.fr/map/files/globalisationthegreatunbundling(s).pdf (20.01.2017).

Baldwin, R.E. (2014). Trade and Industrialisation after Globalisation's Second Unbundling: How Building and Joining a Supply Chain are Different and Why it Matters. In: R.C. Feenstra, A.M. Taylor (eds.), *Globalization in an Age of Crisis: Multilateral Economic Cooperation in the Twenty first Century* (pp. 165–212). Chicago, IL: University of Chicago Press/NBER.

Baldwin, R.E., Lopez-Gonzalez, J. (2015). Supply-chain Trade: A Portrait of Global Patterns and Several Testable Hypotheses. *The World Economy*, *11* (38), 1682–1721.

Bhagwati, J.N. (1984). Splintering and disembodiment of services and developing nations. *The World Economy*, *1* (7), 133–143.

Falk, M., Peng, F. (2011). The increasing service intensity of European manufacturing. *MPRA Paper*, *3860*. Retrieved from: http://mpra.ub.uni-muenchen.de/38600 (22.01.2017).

Fixler, D., Siegel, D. (1999). Outsourcing and productivity growth in services. *Structural Change and Economic Dynamics*, *2* (10), 177–194.

Jones, R.W., Kierzkowski, H. (1990). The role of services in production and international trade: a theoretical framework. In: R.W. Jones, A. Krueger (eds.), *The Political Economy of International Trade* (pp. 31–48). Oxford: Basil Blackwell.

Lewin, A.Y., Massini, S., Peeters C. (2009). Why Are Companies Offshoring Innovation? The Emerging Gobal Race for Talent. *Journal of International Business Studies*, *6* (40), 901–925.

Mainelli, M., Yeandle, M. (2009). *The Global Financial Centres Index*. Retrieved from: http://www.zyen.com/PDF/GFCI_1_March_2007.pdf (5.06.2016).

Miroudot, S., Lanz, R., Ragoussis, A. (2009). Trade in Intermediate Goods and Services. *OECD Trade Policy Papers*, *93*. Retrieved from: http://dx.doi.org/10.1787/5kmlcxtdlk8r-en (5.11.2017).

Motohashi, K. (1997). ICT diffusion and its economic impact in OECD countries. *OECD Science Technology and Industry Review*, *20*, 13–45.

National accounts (including GDP) (2017). Retrieved from: http://ec.europa.eu/eurostat/data/browse-statistics-by-theme (2.11.2017).

National Input-Output Tables (2013). Retrieved from: http://www.wiod.org/release13 (7.04.2015).

Rybiński, K. (2008). Outsourcing i offshoring usług. Siatka pojęć, trendy i bariery rozwojowe. In: A. Szymaniak (ed.), *Globalizacja usług. Outsourcing, offshoring i shared services centres* (pp. 169–188). Warszawa: Wydawnictwa Akademickie i Profesjonalne.

Stewart, J. (2014). PwC/World Bank Report 'Paying Taxes 2014': An Assessment. *IIIS Discussion Paper*, *442*. Retrieved from: https://www.tcd.ie/iiis/publications/discussion-papers.php (5.06.2016).

Trade by Enterprise Characteristics (2017). Retrieved from: http://www.oecd.org/std/its/trade-by-enterprise-characteristics.htm (2.11.2017).

Wyszkowska-Kuna, J. (2016). *Usługi biznesowe oparte na wiedzy. Wpływ na konkurencyjność gospodarki na przykładzie wybranych krajów Unii Europejskiej*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Wyszkowska-Kuna J. (2017). The role of intermediate demand and technology for international competitiveness of the KIBS sector: Evidence from European Union countries. *The Journal of International Trade & Economic Development*, *7* (26), 777–800.

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PUBLIC-PRIVATE PARTNERSHIP PPP AS A FORM OF DELIVERING PUBLIC SERVICES

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Abstract

Determining the place and the role of the private sector in delivering public services is one of the problems that modern economics faces. It is currently believed that there are no goods and services that can only be provided by the private or the public sector. Governments use the form of public-private partnership PPP, which aims to create the components of infrastructure that enables the implementation of public services.

In Poland, the first concession contract with a private investor for the construction and operation of transport infrastructure was signed in 1997. The 20 years of experience with PPP projects leads to assessments and summaries.

The article presents a literature review, which shows that a high number of publications are devoted to the PPP, including identifying the factors for the success of PPP projects. Then, it focuses on the results of the analysis of these factors in terms of practical implementation of projects in Poland. Also, an attempt to answer the question 'At what stage is the implementation of PPP projects as a form of delivering public services' was made.

Introduction

Although the place and the role of the private sector in delivering pubic services is not a new issue in contemporary economics, it is still difficult to answer the question unambiguously: 'how much should the state be engaged in the economy?' The answer to this question is difficult because of the specific nature of public services. They are defined as public administration actions related to the provision of a particular good to which

all citizens have access. Administrative, social and communal services are distinguished amongst public services (Szczudlińska-Kanoś, 2012).

In the 1980s, as a result of the financial crisis, the attention was paid to the private sector as a source of financing public investments. What is more, the effectiveness of the use of financial resources in the public sector was critically assessed, and the quality and level of services offered did not fully satisfy the purchasers. These considerations have caused that the objective scope of the public sector started to be limited. Currently, it is believed that there are no goods and services that can be provided only by the public or private sector (Stiglitz, 2004). Governments entrust the implementation of public services or even investments to private entities. They make use of a form of public-private partnership PPP, which aims to create the components of infrastructure enabling the delivery of public services.

Problematic aspects of PPP have been the subject of scientific research for years and are well known theoretically. The European Commission also supports PPP through directives, communications and other elaborations. It could seem that the implementation has a wide range and high intensity. However, the economic practice has shown that achieving benefits without negative effects is more difficult than literature has indicated. Problems in implementing the partnership have occurred in many EU countries. It was an impulse to undertake research on factors of PPP success.

In Poland in 1997 the first concession contract was signed with a private investor for the construction and exploitation of the A2 motorway. The period of 20 years of experience in PPP implementation has led to the analysis and evaluation, The question is: at what stage is the process of implementing PPP as a form of delivering public services? The article is an attempt to answer this question.

As a fundamental research method, the cause and effect analysis is used to explain the economic phenomena and the conditions that are taking place in the implementation of the partnership. Indirect empirical research, particularly literature, and the monographic method have shown the interest in problematic aspects of PPP, and have helped identify success factors. Further empirical studies, which were based on statistical data, have shown the level of PPP development in Poland in comparison to the European market. Then, using the inductive and diagnostic method, the PPP factors in terms of the degree of their fulfillment were analyzed. This allowed us to define the stage of implementing the partnership in Poland.

PPP – literature review

The problem of public and private sector co-operation in delivering public services is not a new issue in western countries. One of the first scientists dealing with this issue was the professor of the Columbia University – Savas (1982). Research on not only financing but also operation and management of public infrastructure by the private sector was conducted in the 1990s by Osborne and Gaebler (1993). Out of the European countries, the Great Britain implemented various forms of public and private sector co-operation at the earliest and with the largest scale. At the initiative of the government agency – The Private Finance Initiative, a number of theoretical and research papers have been created on the role of private sector in public services and infrastructure (Jackson, Price, 1994; Gayle, Goodrich, 1990).

The concept of public-private partnership itself in the subject literature is defined as a type of agreement between a public partner and a private one, who work together on the project while at the same time they have their own goals and interests. They cooperate on the basis of a clearly defined division of risk and responsibilities

(Flyvbjerg, Bruzelius, Rothengatter, 2003). The result of this cooperation should be a lower cost of the enterprise and a higher quality of services than if they were funded traditionally – from public funds. The form of involvement of private entities in PPP projects depends on its specificity and individual needs of project participants. Detailed classification was presented by among others Mu, de Jong, ten Heuvelhof (Mu, de Jong, ten Heuvelhof, 2010).

In the context of the European structures public-private partnership is an area of interest for the European Commission, especially in the context of the construction of the trans-European network TEN. The Commission supports PPP, because it provides the opportunity to raise private capital, and helps fill the gap between investment needs and available funds of the countries. European legislation documents and other documents such as The Lisbon Strategy of 2000, The White Book of 2011 or an Investment plan for Europe called 'Jucker Plan' created in 2015, indicate the commitment of the Commission. The Commission commissioned to develop guides which were to help with practical implementation of PPP – Guidelines for Successful PPP, A Guide to Guidance.

In Poland PPP studies are relatively new and have been developing since 2000. Their scope includes the use of PPP in widely understood activity of public utility (Moszoro, 2011) as well as in selected areas (Kopańska, Bartczak, Siwińska-Gorzelak, 2008). The analysis of the conditions for PPP development in Europe in terms of institutional environment was taken by Brzozowska (2010).

The subject literature shows also that the success of the partnership requires creating appropriate economic, legal, institutional and social conditions (Galilea, Medda, 2010). The conditions favouring the implementation of PPP are defined as critical success factors CSFs. Their identification was the subject of wide research conducted by Harcattle, Edwards and Akintoye (2005), which resulted in distinguishing five main groups of factors, i.e.: the effective purchasing process, the possibility of project implementation, the government guarantee, favourable economic conditions and available financial market.

For further analysis factors were classified into 4 groups: economic and financial, political and legal, technical, and social. These factors have a varied effect on the PPP success. The study of Chou, Tserng, Lin and Yeh (2012) shows, that at the macro level the following things have the strongest influence: stable macroeconomic conditions, economic and political support of the government, availability of financing, legal system, competent advisory public agencies, social support, transparent ordering process, competition in the ordering process.

Analysis of the PPP implementation in Poland

Examining the level of PPP development in Poland, this issue is worth considering in comparison to the market in Europe. Figure 1 shows the development of the European PPP market in 2003–2016, based on research conducted by the European PPP Expertise Centre EPEC. Data includes large investment projects – up to 2010 they were projects worth over 5 million euro, and since 2011 over 10 million euro.

The PPP market was developing dynamically until 2008. This trend was hindered by the global economic and financial crisis, and the recent years 2014–2016 have brought a further decline of the value of the projects.

By the end of the twentieth century the PPP market was developing mainly in the Great Britain. This tendency continues, and the Great Britain remains an unquestioned leader of the European PPP market (Figure 2).

Compared to other EU countries, the market value of projects in Poland is very small – in 2012–2016 it was only 0.3% of the total value.

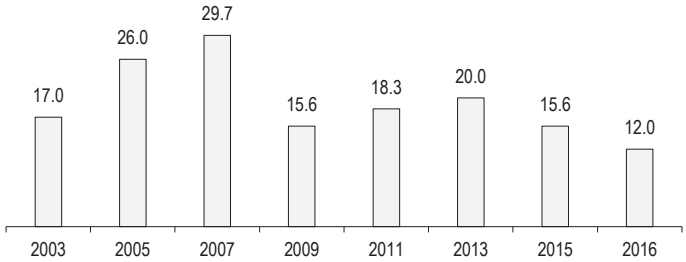

Figure 1. European PPP market 2003–2016, in EUR bn (EPEC, 2017)

Source: own elaboration, based on Review of the European PPP Market in 2012, 2014, 2016 (www.eib.org/epec).

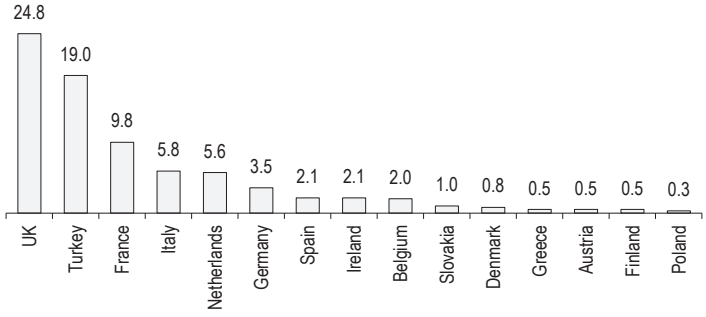

Figure 2. The European PPP market by country over the period 2012–2016, in EUR bn (EPEC, 2017)

Source: own elaboration, based on Review of the European PPP Market in 2012, 2014, 2016 (www.eib.org/epec).

Analysis of this market (Korbus, 2016), covering the years 2009–2016 allowed to identify the following characteristics:

- the projects are mainly initiated by local governments,
- the contribution of the public side to the enterprise was to provide a property on which a private partner was to build the infrastructure based on the rule 'land for infrastructure',
- most of the agreements were signed by the local governments, which are large economically active urban agglomerations,
- 470 PPP auctions were initiated and 112 contracts were signed, so only 25% of the auctions were successful,
- the largest number of agreements was for small projects worth up to 1 million euro – 44% of the total number, however, the agreements worth over 60 million euro represented only 6%,
- the contracts are implemented in the following sectors: sport and tourism – 23%, transport infrastructure – 13%, water and sewage – 6%, healthcare – 6%.

The Polish market can be described as 'under construction'.

The success of PPP implementation requires fulfilling critical success factors, especially at the macro level. They form a fundamental framework for the functioning of the partnership, without them the PPP formula will not exist, not to mention a successful implementation. A detailed analysis of these factors was presented by the

author in the previous publications (Zagożdżon, 2016). Here, however, only relevant research conclusions will be presented, formulated with reference to the most important factors: legal system, the support of the government, and particularly the activities of the public advisory agencies, availability of financing.

Stable law and certainty of its interpretation is a key and necessary condition for the PPP implementation. In Poland, the first law which enabled the private sector to implement road investments was set up in 1994. Practical implementation showed problems, and consequently the law was changed and amended – in 2000 and 2005. The first law on PPP, which gave the possibility for a wide application of this concept by the authorities of all levels, was passed in 2005. This law has formalized the way of carrying out the project analysis at the pre-implementation stage. It was a difficulty which caused that no investments were realized during its validity. After three years, in 2008, a new, more flexible law was passed which initiated the real process of implementation of public tasks in the PPP formula. At present there are relatively few obstacles of a purely legal nature. The regulations are so flexible that even political changes do not exclude interest in PPP (Wachowska, 2016).

However, the problem which has not been resolved unambiguously yet is the impact of liabilities of PPP contracts on the level of the public debt. The possibility to finance investments without charging the limits of liabilities is one of the fundamental prerequisites of public involvement in PPP contracts. Another issue is the lack of clear guidelines regarding the way and consequences of attributing particular risks to individual partners. The correct allocation of risks is a basic action which determines the impact on the debt level of local governments and the profitability of projects.

The position of banks is also important for the implementation of PPP projects. External financial support is relevant at such an early stage as technical preparation of the project, analysis and the selection process of the private partner. In practice funding in mainly provided to the projects which meet one of the two criteria: limited financial involvement of a public partner or a small scale of a project that allows a private partner to make a financial contribution themselves, and repetitiveness of the project. This approach is quite restrictive and a large proportion of projects are not financed. At the same time, banks are willing to provide communities with investment or current loans which have easy procedures and are safe.

The government support and the work of public advisory agencies is a very important factor for PPP success. On the initiative of the Ministry Of Development, the PPP platform was established in 2011, which aims to help to prepare and implement projects. However, the conducted research shows that this support is not enough. There is a lack of extensive training program for public administration staff, private sector and bank staff. Consequently, there is a lack of experienced, well-prepared employees. Another problem is a lack of pilot projects, poor use of positive experiences, a lack of model documents and standards.

The long-standing lack of public advisory institutions causes that the practice of employing an external advisor has not been disseminated – 47% of the entities did not use their help. In the total number of PPP auctions only 25% end up with signing an agreement, in many cases auctions are repeated because there is a lack of interest of private investors (Korbus, 2016). Not flexible enough approach to PPP contracts does not help either. One may think that the public side perceives PPP as a characteristic experiment, and while starting auctions they want to check if PPP can succeed in implementing the project.

A currently implemented project 'Development of public-private partnership in Poland' is an element of PPP support from the government. Its main objective is to improve the qualifications of public administration employees, and the actions include free trainings, workshops, visits and study missions, debates.

Conclusions

A review of the theoretical assumptions and determinants of PPP implementation as a form of public service delivery has allowed to identify the most important determinants: the legal system, government support, in particular the activities of public advisory agencies, the availability of funding. Analysing and evaluating the process of implementing PPP in Poland, one can conclude that the legal regulations are quite well adapted to the specificity of the partnership, however, insufficient support of the government and public institutions is still a problem. The government does not initiate large projects whose success would be promotion and encouragement for using PPP. Involvement of both public advisory institutions and banks in projects is not enough, there is a lack of wide range of trainings and workshops. Inadequate knowledge of PPP leads to the situation that public entities, private investors, banks are cautious and sustainable.

The PPP market analysis shows that the barriers are gradually eliminated, but the pace of these changes is slow. The further development of the partnership and its intensification depends on the activeness of the government and its institutions in spreading knowledge and good PPP practices.

Continuous monitoring and updating PPP implementation as a form of public service delivery in Poland may be the direction for further research. It is worth carrying out an in-depth CSF analysis, using statistical methods and econometric models. The purpose of these studies may be to determine the degree to which these factors are met in economic practice.

References

A Guide to Guidance. Sourcebook for PPPs (2010). Brussels: EPEC, EIB.

Brzozowska, K. (2010). *Public-Private Partnership in Europe. Goals, conditions, effects*. Warsaw: CeDeWu.

Cenkier, A. (2011). *Public-Private Partnership as a method of performing public tasks*. Warsaw: SGH publications.

Chou, J.-S., Tserng, H.P., Lin, Ch., Yeh, Ch.-P. (2012). Critical factors and risk allocation for PPP policy: Comparison between HSR and general infrastructure projects. *Transport Policy*, *22*, 36–48.

Flyvbjerg, B., Bruzelius, N., Rothengatter, W. (2003). *Megaprojects and Risk: An Anatomy of Ambition*. UK: Cambridge University Press.

Galilea, P., Medda, F. (2010). Does the political and economic context influence the success of a transport project? An analysis of transport public-private partnerships. *Research in Transportation Economics*, *30*, 102–109.

Gayle, D.J., Goodrich, V. (1990). *Privatisation and Deregulation in Global Perspective*. London Printer.

Guidelines for Successful PPP (2003). European Commission, Directorate-General Regional Policy. Brussels.

Hardcastle, C., Edwards, P.J., Akintoye, A., Li, B. (2005). *Critical success factors for PPP/PFI projects in the UK construction industry: a factory analysis approach. in Proceedings: Public private partnerships e Opportunities and challenges*. Hong Kong Convention and Exhibition Centre, 75–83.

Jackson, P., Price, C. (1994). *Privatization and Regulation: A Review of the Issues*. London: Longman Group Ltd., 1–34.

Kopańska, A., Bartczak, A., Siwińska-Gorzelak, J. (2008). *Public-Private Partnership. Private entities in the implementation of public tasks of water and sewerage sector*. Warsaw: CeDeWu.

Korbus, B. (ed.) (2016). *Analysis of the PPP market for the period from 2009 to 31st* . Warsaw. PPP Institute. Retrieved from www.ppp.gov.pl (30.05.2017).

Moszoro, M. (2010). *Public-Private Partnership in the public utility sphere*. Warsaw: Oficyna Wolters Kluwer.

Mu, R., de Jong, M., ten Heuvelhof, E. (2010). A Typology of Strategic Behaviour in PPPs for Expressways: Lessons from China and Implications for Europe. *EJTIR*, *1* (10).

Osborne, D., Gaebler, T. (1993). *Reinventing government – how the entrepreneurial spirit is transforming the public sector*. New York: Plume.

Review of the European PPP Market in 2016 (2017). EIB, EPEC. Retrieverd from: www.eib.org/epec (26.05.2017).

Savas, E.S. (1982). *Privatizing the Public Sector: How to Shrink Government*. New York: Chatham House.

Stiglitz, J.E. (2004). *The economy of public sector*. Warszawa: Wydawnictwo Naukowe PWN.

Szczudlińska-Kanoś, A. (2012). Political determinants of delivering social services. *Scientific Letters of the University of Szczecin*. *Economic Problems of Services*, *95*, 55–56.

Wachowska, A. (ed.) (2016). *PPP regulations in selected EU countries and polish law – possibilities of change*. Retrieved from: www.traple.pl (28.05.2017).

Zagożdżon, B. (2016). Public-Private Partnership and the development of transport infrastructure in Poland – the analysis of critical success factors. *Springer Proceedings in Business and Economics*, 125–138.

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NEW SERVICES OF ENERGY COMPANIES

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Abstract

Growing competition in the market causes that the energy companies increasingly are looking for new services that they can offer to their customers. The requirements of these customers are systematically increasing. They expect similar benefits as from other highly competitive and customer-focused industries. So some services offered by energy companies at first glance are not closely related to the energy market, and often involve very distant spheres of sales and supply of electricity. By analyzing the market it is possible to distinguish several groups of services (apart from electricity sales), which are present in the offer of energy companies. These include services accompanying the core businesses of these companies, such as home energy management systems, energy efficiency services, electrical equipment servicing, electric car charging stations and services that are no longer clearly linked to the energy market. Examples include warranty and insurance services, Internet and television signaling services, gardening services, technical customer support for individual customers, smart home building advice, authorization services and loans.

The purpose of this paper is to characterize existing and new services – not related to electricity sales – which are presently offered by energy companies operating on the energy market and to assess the benefits of the introduction of these services to the market.

Introduction

A wide range of energy products and services that are fully tailored to the needs of the energy consumers are the necessary conditions for a positive cooperation between the customer and the electricity seller, and they are at the same time one of the key elements in achieving a competitive advantage over other energy companies.

The main products and services provided by energy companies include the sale of electricity using standard and non-standard products such as (*Produkty*..., 2017):

- sales of standard products, i.e. in tariff groups that result from the Tariffs of Operators System Distribution,
- sale of non-standard products, i.e. fully flexible, valuation of which is based on quotations of the Polish electricity exchange,
- sales of energy in the form of typical trading products such as baseload (constant energy value in each hour during delivery on weekdays, weekends and holidays) or peak load (constant energy from 8:00 to 22:00 on working days),
- energy sales in the form of a full supply with a flexible approach to the risk of imbalance,
- sales of energy in the form of graphs (variable energy value for each delivery period with the risk of customer imbalance).

Apart from selling electricity, companies operating on the energy market may also provide the following energy services:

- Commercial Operator Service (this service is aimed at those trading companies that have a transmission contract with the Transmission System Operator but do not have direct access to the balancing market and want to avoid charges for purchasing and operating their own WIRE system),
- Service of Technical and Commercial Operator (within this service company companies represent clients on the balancing market in the field of transmission of balanced commercial and technical graphics of the units of the planning, manufacturing and receiving units to the Transmission System Operator),
- Trade Balance Service (within this service, as the entity responsible for trade balancing, the company reports to the Transmission System Operator information on the implementation of the electricity sales agreements concluded by the users of the system and calculates the difference between the actual amount of electricity supplied or consumed and the amounts specified in those contracts for each settlement period).

All the aforementioned products and services are inseparable from electricity trading, however, the decrease in margins due to the price struggles of competing companies forces them to sell parallel new sales not necessarily related to the sale of electricity.

Client in the structure of the energy market

There are several groups of participants in the electricity market. The first of these are **electricity generators**, which include: system power plants, local CHPs, power plants and CHPs, hydroelectric plants, wind turbines, solar, biomass, biogas, etc. The second most important part of the market is the **Transmission System Operator** that manage the high voltage power of 220 kV, 400 kV and 750 kV. In Poland this function is done by Polish Power Grids (PSE-Operator). Low voltage power transmission is handled by **Distribution Network Operators** managing 110 kV and lower voltage networks, i.e. those with whom the customer (end user) has a distribution agreement. They are currently in our country 185, although the distribution market is divided between the four main distribution operators: Enea, Energa, PGE and Tauron. In Warsaw the distribution is carried out by RWE. The last group of participants in the electricity market are **trading companies** dealing in energy sales to end customers (about 17.05 million) and wholesale market activity (Zawada, 2011).

Analyzing the consumer's behavior on the energy market, on the one hand, the specifics of this market in Poland and in the world should be taken into consideration, on the other hand, the progressive changes both in the rapid diffusion of modern communication technologies and in the increasing role of distributed energy. The current model based on large energy producers is gradually changing due to the emergence of electricity producers manufacturing energy for their own use; it is understood by consumers – prosumer, who, using new technological solutions, produce energy to meet their needs (Marie, Grybś-Kabocik, Put, 2016).

Research conducted by the National Consumer Confederation in 2016 reveals that the customer of energy industry is becoming to understand that in his relationship with the electricity seller he has to be no longer a petitioner. He has the right to expect similar, positive experiences from other industries – strongly competitive and customer focused. He has not yet decided to take action to change the seller, but is already considering it, is already beginning to know what his energy seller offers him and what he can expect from the competition. He expects the company to meet his needs to help him solve his problems, to anticipate and prevent those that have not yet occurred.

These studies show that small scale energy retailers are making active contact with an individual customer. As many as 82% of households declare that in addition to the invoice within last year the seller did not contact them. 73% of Poles are aware of the possibility of changing the electricity seller, it is no longer a barrier for them, but only 27% think it is very easy or easy. The potential for acquiring new customers is very high, 23% of households plan to change the vendor in the future to reduce costs. Most can not point to a company that would consider a change (*Klient*..., 2014; Pamuła, 2013).

From the energy market observation, its sellers take a very serious approach to the results of such research and strive to put more emphasis in their strategies on customer relationships by offering them not only electricity products and services, but also others not directly linked to the energy market.

New services on the energy market

Looking at the development of the energy market from the point of view of introducing new services, four groups of services (apart from electricity sales), which are today offered by power companies, can be distinguished. Two of these groups can be described as a companion service to their core businesses. These are:

- information services (home energy management systems, end user energy reports, energy efficiency services, Demand Side Response services, online energy consumption information for end users),
- energy services (overvoltage protection, facility upgrades, lighting, weather adaptation services, electrical equipment servicing, electric car charging points).

Two other groups of services are not connected so clearly with the energy market. Firstly, they are warranty and insurance services, Internet and television signaling services, gardening services, and technical support for individual customers. Energy companies also offer services such as intelligent house building consultancy, licensing, credit, or intellectual property licensing services. (Nowaczewski, 2015).

The characteristic feature of the complementary offer is that the basic scope of services provided by energy companies is to put them into packages with the sale of electricity. For example we can buy a package of electricity with:

- access to MS Office 365 (Energa),
- simultaneous purchase of light bulbs LED Philips (PGE),
- small law services (PGE),

- access to medical specialists LUX MED (Enea),
- free bank account at Getin Bank (Enea),
- insurance (Enea – unemployment insurance and casualty insurance, PGE – accident insurance, unemployment insurance, temporary work incapacity insurance, hospitalization insurance, assistance insurance),
- help from a specialist in the event of an energy failure „Energy with electrician 24H" (Tauron),
- professional electrical repairs 24 hours a day „Energy with serviceman 24H" (Tauron).

PGE offers together with the Environmental Protection Bank a package of electricity sales for electricity generators from photovoltaic panels (BOŚ – makes it possible to participate in the „Prosuming" program, PGE provides electricity when the needs of a prosumer are greater than the energy generated by panels). PGE and Tauron also offer to the companies the sale of 100% renewable energy, which is certified with a proof-documents. It is a service addressed to companies whose image is important for the status of environmentally friendly entities. Energa carries under its brand an online store (sections: appliances, tools, sports and health, electronics and lighting, travel and leisure). Obviously, Energa's electricity recipients have some bonuses when using this store, such as free deliveries.

Enea within the service of ENERGIA + Professional advises on how to reduce electricity costs, offers technical and product support, and suggests how to improve the reliability of electrical power. PGE, on the other hand, will not only help to choose tariffs, but will also carry out a number of specialist services, such as capacitor banks, power quality measurements, thermovision measurements of the distribution system, one-day audit so called "walk-through", full audit of power with PQ measurements and load analysis, periodic inspection of the electrical installation together with the SV/n station review, energy efficiency audit in accordance with the Act, white-light certification consultations for energy efficiency (Nowaczewski, 2015).

Energy sales companies are outraged in advertising campaigns that encourage the use of only their services. Here are some examples of selected advertising slogans (Kulesa, 2015):

- And you – what will you do with the free electricity?
- Energy in your account. Make money on promotion (...).
- Fixed Price Guarantee Gas.
- Fixed Price Guarantee – Do not be surprised by the current up until the end of 2019.
- Guaranteed Lowest Price Plus.
- GUARANTEED: 5 PLN cheaper.
- MAXimum savings not only for seniors.
- Offer for prosumers.
- Energy-saving offer.
- Stable Offer with Premium Package.
- Lawyer with Energy – Get a fixed price guarantee up to half of 2017 and legal care Patron Direct.
- Ecological Product.
- The Internet is the cheapest.
- Cheap Gas and Safe Electricity.
- Cheaper after hours.

– Energy service 24/7 – free electro technical intervention and repair of the electrical system as a result of overvoltage.
– Sale of electricity (...). Up to 60% discount on electricity until the end of the year!

The above-mentioned examples of services offered by major electricity retailers in Poland and the variety of advertising campaigns point to a fierce fight for the customer not only through the price of energy but also the additional benefits of being a buyer of energy in this company. With the full range of services offered to current and potential customers, it is possible to read the official websites of the companies mentioned earlier.

The benefits of introducing new products and services

The benefit propositions offered to customers in mature mass-media (banking, telecommunications, etc.) has taught them that they can demand a better offer from the service provider/product. On the other hand, the possibility of changing the electricity seller has become a tool of choice allowing the customers to fight for their rights in relation to the energy supplier. Increased customer awareness and an increasing number of market players have led to an increase in the number of customers who decide to switch to electricity. According to monitoring by the Energy Regulatory Office (URE), according to the state on the end of June 2017, the number of industrial customers (tariff groups A, B, C) who changed their energy supplier since 2007 was 183,862. On the other hand, among the household tariff in the households – tariff group G – the seller was changed by 511,035 recipients (*Urząd*..., 2017).

Increasing competition and growing customer awareness have led to the need to look at electricity from a different perspective. Competitors strive to respond to the specific needs of each segment by expanding their offerings. This is done by expanding energy products and adding more ones not related to energy itself. In this way energy products become similar to products offered in other industries and can be described in the following product layers scheme:

– electricity,
– additional products and services,
– customer experience.

The first layer is the delivery of electricity – these conditions respond to the preferences of consumers in terms of price, exposure to change, consumption in time zones, etc. The next layer is services and products that respond to the preferences of consumers in the purchase of products in a combined offer with other products and services, the use of new solutions, etc. The last layer is customer experience – it addresses the preferences of recipients in the form of settlements, payment terms, level of service, self-service tendencies, contact channels, degree of fulfillment of specific needs (*Koniec*..., 2015).

The development of additional products and services can fulfill three basic functions that improve the economics and efficiency of the customer acquisition process:

– it allows to build an extra margin,
– it is an element of differentiating the offer, allows the customer to create a value that is equivalent to a certain amount of money,
– it is the basis on which marketing communication can be based.

Selling products from other mass-market industries, while having the potential for improving profitability, can be a dangerous strategy in the long run. Mass industries meet the specific needs of customers: the telecommunications

industry sells innovation to the customer, banking and financial security. The energy industry also needs to find a unique customer need that it can meet.

Energy companies should build a value proposition around energy competencies or associated with the power industry. Energy connotations with safety and stability can be used to build a wide range of products.

The energy product is much more than the supply of energy (electricity, gas, heat) – it can be a comprehensive media management service. It is important, however, to find a sufficient market for an "energy product". On mature markets, such services are built around home services. Customers living in homes are characterized by greater consumption of eclectic energy, gas and have some kind of autonomy over the management of their home installations. Therefore, an energy company can develop a wide range of products that support the maintenance of not only electricity, but also gas, and hydraulic systems, and support the customer in optimizing the energy consumption of his home, such as home warming, photovoltaic panels, etc.

Conclusions

The process of liberalization of the electricity market, among others by unbundling or by introducing the TPA principle significantly accelerated the development of the services provided on this market. We can observe that apart from the core services resulting from the Transmission System Operator and Distribution Network Operators concession services, there are also services provided by trading companies and commercial operators.

The widespread trend among energy companies is the widening of the offered product – offering energy companies a wide range of products and services, both energy-efficient and completely outside the sector's interest (so-called service packages). According to this strategy, power companies are transforming not only into multi-energy companies that provide different energy sources, but also in multi-media companies providing very diverse packages of products and services. In the case of energy companies, the potential product may be both a substitute product (e.g. introduction to the offer of electricity companies) and a product complementary to the primary product – the energy carrier (e.g. the sale of energy equipment) (Zawada, 2013).

Power companies make a profound change to their approach to customers. Traditionally, when they had monopoly status, they identified customers only from the counter or meter side at the end of the power line or pipeline. Nowadays it is necessary to know the individual needs, preferences and expectations of clients and collect as much information as possible about them. This information can be initially transformed into customer knowledge that can be used, inter alia, to predict their behavior and to more accurately determine target segments. This involves the use of increasingly sophisticated customer relationship management (CRM) systems and the use of data mining techniques (Wiernek, 2008).

One thing is certain – the market for new services offered by energy companies due to increased competition and increased consumer awareness, which will be increasingly sought in the near future, will develop dynamically.

References

Klient indywidualny na rynku energii elektrycznej (2014, November). Retrieved from: http://www.4prm.com/files/ient_indywidualny_na_rynku_energii_elektrycznej_Raport_og__lnodost__pny.pdf (10.07.2017).

Koniec tradycyjnej energetyki? – Jak wygrać w dobie zmian (2015). Raport PWC i ING Banku Śląskiego. Retrieved from: https://www.pwc.pl/pl/publikacje/assets/pwc-ing-raport-koniec-tradycyjnej-energetyki.pdf (25.07.2017).

Kulesa, M. (2015). *Nowe produkty na rynku energii elektrycznej jako rozszerzenie oferty Operatorów Telekomunikacyjnych – wybrane zagadnienie*. Retrieved from: http://www.wasko.pl/wp-content/uploads/2015/05/Rozszerznie_oferty_o_produkty_z_rynku_energii_elektrycznej1.pdf (15.07.2017).

Marie, A., Grybś-Kabocik, M., Put, A. (2016). *Wirtualizacja zachowań konsumentów na rynku usług energetycznych*. Retrieved from: https://www.cars.wz.uw.edu.pl/tresc/konferencje/25/Wirtualizacja_zachowan_konsumentow.pdf (1.07.2017).

Nowaczewski, G. (2015, September). *Komu są potrzebne nowe usługi przedsiębiorstw energetycznych*. Retrieved from: http://grzegorznowaczewski.innpoland.pl/121061,komu-sa-potrzebne-nowe-uslugi-przedsiebiorstw-energetycznych (15.07.2017).

Pamuła, A. (2013). Aspekty komunikacji klient indywidualny-dostawca energii elektrycznej w aktualnych i przyszłych sieciach elektroenergetycznych. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, *763. Ekonomiczne Problemy Usług*, *105*, 363–372.

Produkty i usługi (2017). Retrieved from: http://www.cezpolska.pl/pl/produkty/energia-elektryczna/produkty-i-uslugi.html (10.07.2017).

Urząd Regulacji Energetyki. Retrieved from: www.ure.gov.pl.

Wiernek, M. (2008). *Marketing produktu w polskich przedsiębiorstwach gazowniczych na europejskim rynku energii*. Retrieved from: http://winntbg.bg.agh.edu.pl/rozprawy2/10076/full10076.pdf (30.07.2017).

Zawada, M. (2011). Przesył i dystrybucja energii elektrycznej w Polsce. *Logistyka*, *5*.

Zawada, M. (2013). Marketing activities on the energy market in the European Union. *Visnik Nacional'nogo Universitetu "L'vivs'ka Politehnika"*, *762. Logistika*, 66–73.

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