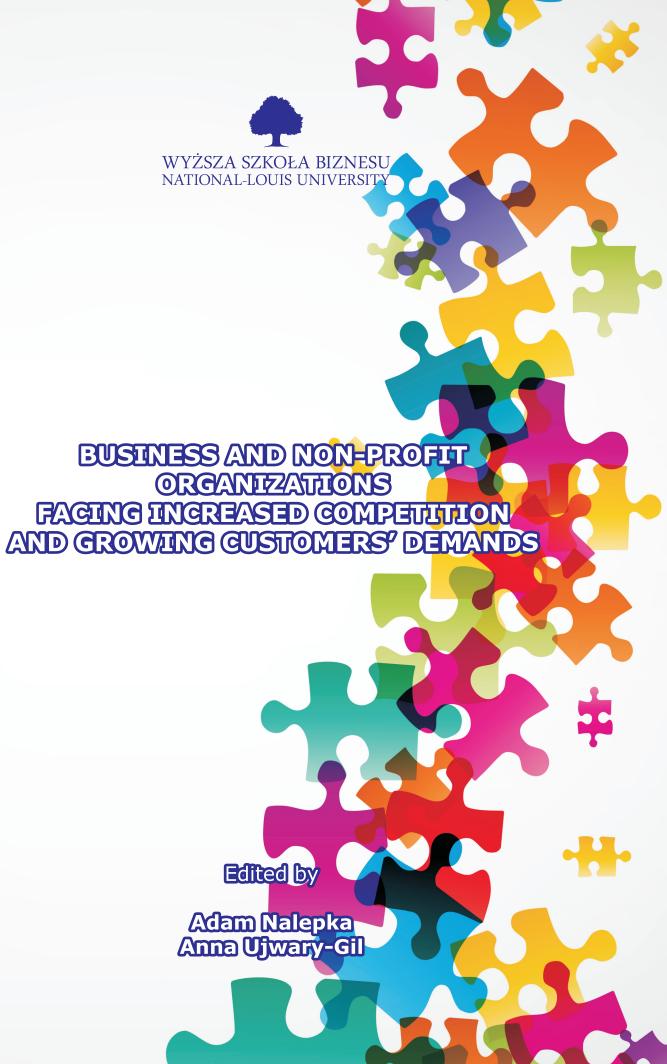
EUSINESS AND NON-PROFIT ORGANIFATIONS
FACING INGREASED COMPETITION AND GROWING CUSTOMERS' DEMANDS

孔孔

This publication is sponsored by:



ISBN: 978-83-88421-80-8



BUSINESS AND NON-PROFIT ORGANIZATIONS FACING INCREASED COMPETITION AND GROWING CUSTOMERS' DEMANDS

Edited by

Adam Nalepki, Anna Ujwary-Gil

This publication is sponsored by:



Reviewers:

prof. dr hab. Barbara Błaszczyk, prof. dr hab. Józefa Famielec, dr hab. Anna Fornalczyk, dr hab. Iwona Kowalska, prof. dr hab. Marek Lisiński, dr hab. Kazimierz Perechuda, dr hab. Halina Piekarz, dr hab. Kazimierz R. Śliwa

Proofreading:

Paul Neuwelt

Cover design:

mgr inż. Janusz Bak

Cover photo:

Fotolia.com

© Copyright by Wyższa Szkoła Biznesu – National-Louis University in Nowy Sącz 2012

All rights reserved. No part of this publication may be copied, reprinted or transmitted in any form without the prior permission of the publisher.

ISBN: 978-83-88421-80-8

Typeset:

FIRMA PUNKT, Katarzyna Foszcz

Printing and Binding:

Wydawnictwo i Drukarnia NOVA SANDEC

CONTENTS

Inti	oduction	5
	I. BUSINESS AND NON-PROFIT ORGANIZATIONS AS THE OBJECT OF RESEARCH	
1.	e e e e e e e e e e e e e e e e e e e	
2.	- Olaf Flak	9
2	- Małgorzata Genzels	9
3.	- Anna Scheibe	4
4.	Multiparty Negotiations – Research Problems Formulation – Andrzej Kozina	5
5.	Socially Responsible Innovations (SRI) from a Transactional Cost Perspective - A Chance for Growth and Development or a Waste of	_
6.	Time and Money? – Adrian Pyszka	7
	rvice Satisfaction Factors - Przemysław Stach, Piotr Staliński, Monika Stawicka	3
]	II. BUSINESS AND NON-PROFIT ORGANIZATIONS IN A MARKET ECONOMY	
7.	Product Innovations in Processes of Mature Non-Profit Organiza- tions – Case Study: a Government District Office	
8.	- Michał Flieger, Agnieszka Kołodziejczyk	
9.	 Regina Lenart Unemployment among University Graduates and the Structure of Education in Poland at the Tertiary Level 	/
10.	- Bianka Godlewska-Dzioboń	0
11.	 Katarzyna Kolud Transformations of the Interactive TV Market in the New Media David E. Kalisz 	
	11	_

III. MODERN TOOLS FOR BUSINESS AND NON-PROFIT ORGANIZATIONS MANAGEMENT

12.	Lessons Learned System as a tool of Managing Organisational	
	Knowledge: the Case of Military Organisations	
	- Jarosław Jabłoński, Andrzej Lis	163
13.	Planning Marketing Strategies in Non-Profit Organizations – Presen-	
	tation of the Direct Research Results	
	- Wioletta Kwak	197
14.	Intellectual Capital Statement of a Company Operating in a Made to	
	Measure Industry	
	- Anna Ujwary-Gil, Łukasz Ross, Agata Kubiś	197
15.	Methodological Aspects of Intra-Organizational Trust Management –	
	Diana Stolarska	221
16.	Tax Controversy Concerning Employee Stock Options	
	- Marcin Jamroży	238
17.	Effectiveness of Market Strategy for Management of Brand Portfolio	
	Consisting of Innovative Drugs and Their Generic Equivalents	
	- Krystian Barłożewski	
IV		
	- Krystian Barłożewski	
	Krystian Barłożewski BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market	3 –
18.	- Krystian Barłożewski - BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko	3 –
18.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks	2 69
18. 19.	- Krystian Barłożewski - Business and non-profit organizations Global and Regional as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater	2 69
18. 19.	- Krystian Barłożewski - BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee	2 69
18. 19.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee Charging Rules and Reporting	269 279
18. 19. 20.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee Charging Rules and Reporting - Wioletta Roman	269 279
18. 19. 20.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee Charging Rules and Reporting - Wioletta Roman Anti-Crisis Actions of Government and Central Banks	269 279
18. 19. 20.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee Charging Rules and Reporting - Wioletta Roman Anti-Crisis Actions of Government and Central Banks - Ludmiła Kryskova	269 279
18. 19. 20.	- Krystian Barłożewski J. BUSINESS AND NON-PROFIT ORGANIZATIONS GLOBAL AND REGIONAL ASPECTS Local Commune Administration as a Regulator of the Local Water Supply and Sewage Disposal Services Market - Jacek Małysko Image and Communication of Polish National Parks - Beata Pater Fees for the Use of the Natural Environment by Entrepreneurs - Fee Charging Rules and Reporting - Wioletta Roman Anti-Crisis Actions of Government and Central Banks	269 279 292 310

INTRODUCTION

The monograph focuses attention on the description and analysis of new phenomena and processes for commercial and non-commercial organizations. Valid conditions are pointed out for the functioning of both commercial and non-commercial organizations and an attempt is made to explain their impact on these organizations. The analysis also examines the strategies used by organizations in the face of fierce competition and increasing consumer demands in their effort to gain and maintain a competitive edge.

This case study below is segmented into four areas of interest:

- commercial and non-commercial organizations as an object of research,
- commercial and non-commercial organizations in a market economy,
- modern tools for managing commercial and non-commercial organizations
- commercial and non-commercial organizations global and regional aspects

The first section contains a discussion of management science as a starting point for this study as well as contemporary issues: the use of a gender ratio index in the implementation of an equal opportunities policy in the enterprises as well as prosumer behavior in creating brand image. Also research problems have been addressed connected with multiparty negotiations. The chapter ends with a discussion of socially responsible innovation from the perspective of the theory of transaction costs and factors accounting for customer satisfaction with services.

Part two begins with an article on product innovativeness in processes of a mature non-profit organization selected as a case study from local government. It is demonstrated how commercial and non-commercial organizations are managing in a market economy. Hence the article concerns the new model of competition and the impact of social media on the effectiveness of measures undertaken by interactive television, an analysis of the absorption capacity of schools, the level of unemployment and the structure of higher education in Poland.

Subsequently the third part contains articles on the topic of modern tools utilized in the management of organizations. From here the chapter goes to an analysis of trust management of an intraorganizational dimension, the concept of knowledge management and the system of utilizing experience in a military organization for example, as well as results obtained from the use of European Intellectual Capital Statement tool to evaluate the intellectual capital of companies operating in the made-to-measure industry. Also shown are several new findings in the field of planning marketing strategies in non-profit organizations, and concepts of employee share options.

The last part is devoted to the global and regional aspects of an organization, which addresses the problems of local governments as regulators of water and sewage disposal services, fees for entrepreneurs for the commercial use of the environment, as well as image and social communication for national parks. Globally speaking all these aspects are connected with the modern crisis, how the banks are dealing with it and how the process of establishing fines for members of the cartel in the EU pans out.

Adam Nalepka, Anna Ujwary-Gil

I. BUSINESS AND NON-PROFIT ORGANIZATIONS AS THE OBJECT OF RESEARCH

Olaf Flak*

MANAGEMENT SCIENCES

Abstract

This paper reflects on the development of management sciences. The author presents which a contemporary researcher encounters during his attempt to explain organizational reality and also some main approaches to theoretical and empirical research in sciences. The reflections are effects of several year of studies on the system of organizational terms.

Key words: management sciences, ontology, epistemology, sources of knowledge, scientific standards

1. Introduction

The goal of this paper is to present a sketchy picture of management sciences from a methodological of view. The paper contains the following items:

- a short historical feature of this scientific discipline and a description of how several philosophical approaches have affected the development of management sciences as well as sources of knowledge in this discipline,
- a discussion on rating management sciences as one of the scientific fields,
- the role of mathematics in management sciences,
- the phenomena of the utopian feature of management sciences and the dilemma of using different research approaches,
- doubts about keeping to scientific standards in management sciences.

This paper is an essay. On the basis of previous literature on the topic of management sciences and methodology, the author addresses issues which concern basic aspects of management science development.

2. Influences

At the start of management sciences – in the first years of the 20th century – researchers focused their work on a selected manufacturing plant. They tried to collect data and draw conclusions from a technical, physiological and economic point of view. And the next step was to research human relations in an

^{*} Dr inż., Adiunkt, Uniwersytet Ekonomiczny w Katowicach.

organization [Krzyżanowski 1999, s. 133]. As time passed the number of subdisciplines and specific scientific subjects surrounding this topic increased significantly. However, each of them seemed to go his own unique way. As the result there have been few common fields of scientific study.

On one side representatives of main management schools have an empiric approach. August Comte claimed that a real and true science consists of laws governing facts. From the other side many researches have a deep humanistic way of thinking about a man in an organization. They say it is essential to determine conditions, correlations and sources of the facts in human environments [Miś 2006, s. 20 i 221].

Researchers in management sciences have been influenced by several philosophical approaches since the revolutionary paper of F. Taylor was published. His approach concerned ontological and epistemological issues. One of such approaches was rationalism, which excludes any indirect connection between a researcher and reality. In the same way irrationalists are blamed for the effects from their ideas and for theories" were derived knowledge [Motycka 2009, s. 103]. In management sciences this division is deemed to be inappropriate.

It is obvious to say that the development of management sciences has been determined by other social sciences. Such terms as "the interaction theory", "the theory of an organization" and "social roles theories" derived from sociology. Many researches claim that the basis of management sciences is just sociology. All processes in organizations have sociological features. One of the main parameters of this process is that it is possible to observe it directly. Despite the fact that in order to observe the process we need introspection, it is acceptable to record data from outside researchers [Nowak 1970, s. 29-31].

Since the development of management sciences was shaped by other scientific disciplines, it is possible to find some features of methodological behaviorism and materialism in management sciences. One of main assumptions of this approach is that scientific statements should be able to be controlled during objective experiments. However, objective facts about human behavior are allowed to be reckoned only through human actions [Seatle 2000, s. 57]. This positivism approach is the basis of most theories in managements sciences, especially those concerning an organization [Cole, Chale, Couch, Clark 2011, s. 141].

Another approach which influenced management science was that of physics analogies. This can be treated as a type of materialism. This approach forces researchers to make a research model based on empirical definition not only theoretical definitions [Searle 2000, s. 61].

Readers aware of this can find research work about management schools focused on resources. The analogy implies that an organization is like a mind and an organization's resources are like a brain. It is possible to quote the opinion of A. Glińska-Neweś and B. Godziszewski, who stated that a resources' approach in management sciences is present in research which indicates the correlations between the success of an organization and its features and between the number and the configuration of resources [Glińska-Neweś, Godziszewski 2010, s. 242].

S. Cyfert and K. Krzakiewicz Clair state that knowledge in management sciences is open. It means the knowledge is still being developed and this phenomena in an organization can be found to be only in a certain context. The aim of research is to interpret facts in their environmental background [Cyfert, Krzakiewicz, 2009, s. 10].

Evolution in management sciences means that this fragile system of terms is going to be ruined. We can find many past authors who have tried to present coherent and comprehensive systems of terms [Zieleniewski 1978, Kotarbiński 1965]. We could discuss their ontological and epistemological assumptions as they kept very close to a scientific ideal model. Nowadays it seems there are many destructive processes in management sciences. Even academic handbooks carry on the dispute over what management means [Stoner, Wankel 1994, s. 361].

3. Origins of knowledge

William Petty said a hundred years ago "Making politics without knowledge of measurement, structures and features of society is as superficial as practices of charlatans and wizards" [Ball 2007, s. 70]. When we change the word "politics" into "managing" and the term "a society" into "an organization", it is easy to see troubles in managements sciences.

Such an interpretation of Petty's could be found in the works of A. Koźmiński and A. Zawiślak. Their two-role book formed 30 years ago shows that a society and an organization are very similar. The authors wrote that "management processes are always held in the social structure which creates its content (…)" [Koźmiński, Zawiślak 1982, s. 114].

It seems that in management sciences the origin of knowledge simply comes from human senses, which are represented from a technical point of view by empirical research. What is more interesting, knowledge is being developed based on surveyed participants of organizations gathering opinions about facts an organizational reality. This statement is just an assumption of the author based on inductive reasoning. However, if this holds true, management sciences have a noisy human "buffer" along the way between the real world and their scientific description.

R. House put forward some questions concerning the future of management sciences. The first question is essential and it concerns minimal requirements in order that we may define management sciences as being "scientific". The second question is about differences between utility and reliability of theories in management sciences. Physics is an ideal example of this. The third question concerns practical requirements of management sciences. There is also an additional issue about what way empirical research influences the theoretical background of management sciences [House 1971, s. 7]. One must admit, that R. House does not address these questions.

A. K. Koźmiński and D. Latusek-Jurczak draw attention to the point that management science, such as many social sciences, have many different paradigms and different points of view on this phenomena may exist[Koźmiński, Latusek-Jurczak 2011, s. 25]. S. Sudoł wrote that the main role of any science, especially management science, is to help people to foresee the future in an organization. Another role is to determine practical rules and ways of acting [Sudoł 2010, s. 11].

In most sciences a permanent conflict exists between entirety and rigorousness [Deutsch 1997, s. 27]. In management sciences such terms as "social capital", "talent management" or "entrepreneurship", are contrary to Taylor's rule, which was to recollect an object into pieces, let these pieces develop and then again put them together.

One of the approaches to creating theories in management science we can find in papers by D.A. Shepherd and K.M. Sutcliffe. In their opinion all the work on any theory starts from literature, which studies previous research done. This knowledge must be analyzed critically and transformed in a researcher's mind in order to change it into a theoretical representation of the real world. Afterwards it can be developed further by new factors, research effects or intuition. As the result of this process a new theory emerges.

The procedure of creating new theories is shown in the figure 1.

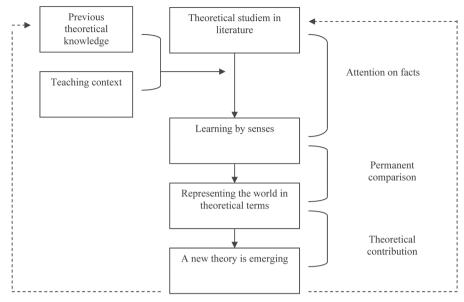


Figure 1. Creating theories in management sciences [Shepherd, Sutcliffe 2011, s. 367].

When we understand figure 1, it is easy understand the issue addressed by D. Deutsch: Is the structure of reality is always unified and understood for researchers?" [Deutsch 1997, s. 34].

In the case of management science reality means organizational reality, which is only a mere part of the whole world. This question arose from the intuition of researchers.

At first the answer is: Yes. But why? If mathematics — which we can understand as the most unified and simple representation of the world — is able to be an essential part of the structure of the world, why should it not be part of the structure of organizations? Why is organizational reality not mathematical?

A further question can be asked: If this is not so, why wouldn't organizations be objects from this real world?

4. Mathematical subtlety or wide-spreading erudition

In his latest book K. Zimniewicz started the discussion about a connection between theory and practice in management sciences and he put forth the question as to if management sciences belong to idiografic or nomotetic sciences? [Zieniewicz 2008, s. 137]

An unequivocal answer to this question would lead to several consequences in the field of methodology of research. It seems that researchers are very rarely aware of this dilemma. For example, those, who use the case study method, should be classified in the idiografic field, while researchers who use "quantitative methods" belong to the school of nomotetic research.

One could say that some phenomena need to be treated in one way and others in another. Yet, if we take this all for granted, one could easily question the integrity of management sciences.

In other literature we can read about researchers, like J. Niemczyk, who claims that management sciences are interdisciplinary and that it's not easy to determine if they are idiografic or nomotetic. They may simply be treated in both ways [Niemczyk 2009, s. 4].

J. Rokita draws our attention to problems faced by researching companies. Firstly, such research is based on a one-time-only study. This means researchers become familiar with the situation only at one point in time. J. Rokita calls this methodological approach "a static assessment of reality". Secondly, most research is not focused on reasons for the effects noted. The results of research contain mostly correlations between items in time and do not concern reasons [Rokita 2010, s. 258].

When noting the results of this research, one might ask oneself: Are the conclusions derived from the data still scientific and do they verify the hypothesis or allow us to establish scientific theories?

H.G. Hicks and F. Goronzy claim that each theory in management sciences possesses multiple features related to personal values of the researcher creating it. This is certainly not a positive aspect in development of management sciences [Hicks, Goronzy 1967, s. 383].

It is worth quoting A. Grobler, who wrote about the problems of Francis Bacon. This classic philosopher had many troubles when he tried to give his assumption based on inductive methods. A. Grobler claims he did not take into consideration mathematics to assist him in his research. Mathematics and astronomy were considered to be something for nobility. Other fields of knowledge were treated as common doxa [Grobler 2008, s. 28]. It seems that management sciences are divided this way.

In turning to the point of whether management sciences should be called idiografic or nomotetic, it is worth citing a question formed by J. Niemczyk: Is it better to use mathematical subtlety or wide-spreading erudition in management sciences? [Niemczyk 2009, s. 5]

5. Utopia and pluralism

Ł. Sułkowski wrote about management sciences in a very fine manner and defined them as utopian. On one hand they show an explicit or implicit vision of a better world. On the other hand researchers claim it is possible to get know this world in detail [Sułkowski 2005, s. 7].

What is more, in his opinion this utopian feature means management sciences follow a positivistic way of thinking and try to discover the only truth about the organizational world [Sułkowski 2005, s. 7]. Utopia in social fields is defined as the attempt to create a better world similar to the projected one and equal to theoretical assumptions [Sułkowski 2005, s. 7].

Ł. Sułkowski claims this is impossible to achieve. Hence the question: Is it possible to get to the truth and if not (according to Sułkowski), are management sciences still scientific?

Another opinion is stated by P. Darmer's. He expressed a very interesting opinion concerning management sciences, announced in 1975 by Becker. He claimed that in 1970s there was overproduction of "the truth", or basically there was an eruption of huge numbers of research results. This mean that it was virtually impossible for a common researcher to explain all the different theories in management sciences, not to say, become familiar with them all [Darmer 2000, s. 337].

Another paper which was important in the field of management sciences and their development was published in 1980 by H. Koontz. He proved that in management sciences many shallow topics are presented by sophisticated words and understandable statements. He called this language of doubtful rules and assumptions, "the jungle of theory of management" [Koontz 1961].

- As A. Koźmiński and D. Latusek-Jurczak wrote, in the decades of development in the management science, many methodological schools have been established. They were created by people who did not always used reasonable arguments to prove their assumptions. The authors wrote about S. Ossowski, who in 1967 was a good example of such behavior. In this case demonstrating power and an unwillingness to compromise in this field took priority over presenting scientific effects [Koźmiński, Latusek-Jurczak 2011, s. 25].
- E. Masłyk-Musiał said in his very divisive opinion that "the strength of management sciences lies in their diversity" [Mastyk-Musiał 2010, s. 15]. Unfortunately, it is not easy to agree that this is an advantage of this science and that allowing it to develop by adding pieces of knowledge one to the other is a important.
- D. Deutsch wrote that many scientific theories are gradually diminishing from a level which explains the world, to the level of simple statements about general rules which facts follow [Deutsch 1997, s. 19].

P. Verschuren and R. Hartog are critical of the trend in management science present over the last decade. They published their paper in 2005 and called this trend as "looking for knowledge in order to look for knowledge". They claim that many researchers create a description of the world and they do not progress further to the reasons. This is destructive to the development of management sciences [Verschuren, Hartog 2005, s. 733].

"The breaking away from scientific features" nature of management sciences is very often explained as a stage in the life cycle of this scientific discipline. S. Sudoł pointed out that management sciences are quite young compared to pure sciences and even to social sciences. He indicated that many terms and phenomena still have a very soft nature. This means that management sciences do not have strict definitions and stable research methods. He wrote: "There is too much subjectivity" [Sudoł 2010, s. 8-9]. S. Sudoł also wrote that now it is very easy to form new theories in management sciences. They do not have any support from verified methods of analysis and they should be treated only as hypothetical [Sudoł 2010, s. 8-9].

Ł. Sułkowski added that "management sciences at this stage of development should not be universal and too objective" [Sułkowski 2005, s. 8]. Of course there is a question of if at this stage researchers should stop attempting to create stable and objective knowledge instead of forming subjective opinions.

Returning to the utopian feature of management science Ł. Sułkowski enumerates several assumptions which create this utopia. They are as following:

- a) there is the need to believe in continual scientific development,
- b) a universal and foolproof research method is in the process of being developed,
- c) the need for mathematic and statistic representation of the organizational world,
- d) using a "reduction into pieces" approach instead of a holistic approach,
- e) aspiration to create a finished and deterministic explanation of the organizational world [Sułkowski 2005, s. 8].

These arguments are enumerated by Ł. Sułkowski as being a negative epistemic approach to conducting research in management sciences. He admits that the advantage of contemporary management sciences has a social scope and departs from positivistic values. Such an assessment is not common in science.

6. Conclusions

This paper is one of many voices to be heard in the discussion about developments in management sciences. It is also an effect of theoretical research

done by its author during several years of studying the methodology of science in order to built a system of organizational terms. The problems mentioned here might be better solved if such a system existed.

References

- 1. Ball P., *Masa krytyczna*, Wydawnictwo Insignis, Kraków 2007.
- 2. Cole C., Chase S., Couch O., Clark M., Research Methodologies and Professional Practice: Considerations and Practicalities, The Electronic Journal of Business Research Methods, Volume 9 Issue 2 2011 (pp 141-151).
- 3. Cyfert S., Krzakiewicz K., Nauka o organizacji, TNOiK, Poznań 2009.
- 4. Darmer P., *The subject(ivity) of management*, Journal of Organizational Change Management, Vol. 13 No. 4, 2000, pp. 334-351.
- 5. Deutsch D., *Struktura rzeczywistości*, Prószyński i S-ka, Warszawa 1997.
- 6. Glińska-Neweś A., Godziszewski B., *Zarządzanie zasobami*. [w:] *Osiągnięcia i perspektywy nauk o zarządzaniu*, Red. S. Lachiewicz, B. Nogalski, Wolters Kluwer Polska Sp. z o.o., Warszawa 2010.
- 7. Grobler A., Metodologia nauk, Wydawnictwo Znak, Kraków 2008.
- 8. Hicks H.G., Goronzy F., *On Methodology In The Study Of Management And Organization*, The Academy of Management Journal 1967.
- 9. House R.J., Research Criteria and Methods for the Development of Management Theory, Administrative Science Quarterly, Johnson Graduate School of Management, Cornell University, 1971.
- 10. Koontz H., The management theory jungle [w:] Journal of the Academy of Management, 1961. vol. 4, No. 1
- 11. Kotarbiński T., *Traktat o dobrej robocie*, Zakład Narodowy im. Ossolińskich, Wrocław-Warszawa 1965.
- 12. Koźmiński A. K., Latusek-Jurczak D., *Rozwój teorii organizacji*, Wolters Luwers Polska Sp. z o.o., Warszawa 2011.
- 13. Koźmiński A., Zawiślak A., *O organizacji. Dwugłos względnie uporządkowany*, PWE, Warszawa 1982.
- 14. Krzyżanowski L., O podstawach kierowania organizacjami inaczej: paradygmaty, modele, metafory, filozofia, metodologia, dylematy, trendy. Wydawnictwo Naukowe PWN, Warszawa 1999.
- 15. Masłyk-Musiał E., *Badawcze wyzwania w naukach o zarządzaniu*, [w:] *Osiągnięcia i perspektywy nauk o zarządzaniu*, red. S. Lachiewicz, B. Nogalski. Wolters Kluwer Polska Sp. z o.o., Warszawa 2010.
- 16. Miś A., *Filozofia współczesna, główne nurty*, Wydawnictwo Naukowe Scholar, Warszawa 2006.

- 17. Motycka A., Spory filozoficzne o racjonalność nauki. [w:] *W kręgu filozofii, nauki, kultury i społeczeństwa*, red. T. Buksiński, E. Bakszysz, Wydawnictwo Naukowe Instytutu Filozofii, Poznań 2009.
- 18. Niemczyk J., Chciałbyś coś odkryć, Przegląd organizacji, 10/2009.
- 19. Nowak S., Metodologia badań socjologicznych, PWN, Warszawa 1970.
- 20. Rokita J., Systemowe podejście do badań nad zachowaniami organizacji, [w:] Kierunki i dylematy rozwoju nauki i praktyki zarządzania przedsiębiorstwem, red. H. Jagoda, J. Lichtarski, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław 2010.
- 21. Searle J.R., *Umysł. Krótkie wprowadzenie*, Rebis, Poznań 2000.
- 22. Shepherd D.A., Sutcliffe K.M., *Inductive Top-Down Theorizing: A Source of New Theories of Organization*, Academy of Management Review, 2011, Vol. 36, No. 2, 361–380.
- 23. Stoner J. A. F., Wankel C., *Kierowanie*, Państwowe Wydawnictwo Ekonomiczne, Warszawa 1994.
- 24. Sudoł S., Main Dilemas f Management Science, [w:] Organization and Management, No 1 (139), 2010.
- 25. Sułkowski Ł., Utopia zarządzania, [w:] Przegląd organizacji, 11.2005.
- 26. Szwec P., Cele i perspektywa krytycznej nauki o zarządzaniu, [w:] Przegląd organizacji, 7-8.2006.
- 27. Thompson M., Ontological Shift Or Ontological Drift? Reality Claims, Epistemological Frameworks, And Theory Generation In Organization Studies, Academy of Management Review, 2011, Vol. 36, No. 4, 754–773.
- 28. Verschuren P., Hartog R., *Evaluation in Design-Oriented Research*, Quality & Quantity, (2005) 39:733–762.
- 29. Zieleniewski J., *Organizacja zespołów ludzkich. Wstęp do teorii organizacji i kierowania*, PWN, Warszawa 1978.
- 30. Zimniewicz K., *O potrzebie dyskusji na temat metod zarządzania*, [w:] *Ku nowym paradygmatom nauk o zarządzaniu*, red. J. Rokita, GWSH, Katowice 2008.

Małgorzata Genzels*

THE USE OF A GENDER INDEX IN THE IMPLEMENTATION OF AN EQUAL OPPORTUNITIES POLICY IN ENTERPRISE

Abstract

The equal opportunities policy is attracting more and more supporters within Polish entrepreneur circles. Certain phenomena such as; the migration of professionals to EU countries, aging of the Polish society, new regulations prohibiting discrimination in the workplace on grounds of gender and higher levels of education among women in relation to men, have awoken much interest in gender equality issues at the present time. The implementation of these policies in enterprises will not only boost women's role within the labor market, but also, provide a source of economic advantages and increasing benefits to employers. One of the tools intended to monitor gender equality in the workplace is the Gender Index.

The aim of this article is to show the advantages arising from the implementation of an equal opportunities policy in enterprises with particular attention to the Gender Index.

Key words: payroll discrimination, model of personal biases, the labour market signals theory, gender equality policy, Gender Index.

1. Introduction

One of the features of labor markets in numerous countries is the occurrence of disproportion between women and men employed in any particular field. This phenomenon is characterized by:

- higher employment rate among men;
- higher activity rate among men;
- higher unemployment rate among women;
- horizontal segregation, according to which the professional activity of women covers a few employment fields only, while the same activity of men is uniformly spread over nearly all areas [Korzec 2000];

^{*} MSc, the doctoral student, Full-Time Postgraduate Study, the Economy and International Relationships Faculty at the Cracow University of Economy.

 occupational segregation in a vertical plane expressed by a lower women proportion in relation to men holding positions of managers or other posts associated with making decisions, or by an unequal remuneration rate for the same job [Ibidem].

The implementation of the equal opportunities policy in enterprises is the chance for the correction of such inequities, and also for taking countermeasures against the discrimination on grounds of gender.

The main objective of this article is to obtain answers to the following questions:

- What are the reasons for discrimination against women in the labor market in light of economic theories?
- For what reasons would an employer be interested in the implementation of an equal opportunities policy within its own business organization?
- How could an equal opportunities policy be implemented in an enterprise and do tools currently exist to do so?

2. Discrimination against women in the labour market from an economic point of view

For the first time, the general definition of the notion of discrimination appeared in 1954, in the paper under the title: "The Nature of Prejudice" by the American psychologist, Gordon Willard Allport. He has described the discrimination, as "the prejudice of the individuals or groups of people's right to the equal treatment expected by them" [Las kobiet... 2010, page 4]. 25 years later, this notion was entered into the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted in 1979 by the UN General Assembly. In Article 1 of that document, we can read that discrimination against women means "...any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field." [Konwencja w sprawie likwidacji..., Art.1].

According to the Polish Code of Labour, discrimination against an employee in a labour market is defined as "unequal treatment, indirectly or directly, to the extent of the employment and termination of service, terms of employment, promotion, and an access to training courses to improve vocational qualifications, based on gender, on belief, nationality, or sexual orientation, etc., as well as, every behaviour, which aims at or results in an employee's dignity infringement, or an employee's degradation, or humiliation, so called – harassment [Kodeks pracy... 2008, chapter IIa, art.183a].

From an economic standpoint in relation to the labour market, two categories of discrimination are emphasised. The first one is restrictions in the access to education and other forms of investing in human and social capital that discriminated individuals encounter [D'Amico 1987, page 311]. The second category illustrates the situation, where individuals characterised by identical or equalling economic features are treated in an unequal way in terms of promotion, forming work condition, or receiving of different remuneration for the same job [Handbook of Economics... 2009, page 91].

In reference books regarding women's situation in the labour market, utmost importance is attached to payroll discrimination. In Poland and also in many other European countries women earn less in comparison to men. According to data taken from the All-Poland Remunerations Report carried out in 2011, the average women's wages were at the level of 3,400 Polish Zlotys and were lower by 18% than those of men (4,000 Polish Zlotys). Women holding management positions had salaries of 5,000 Polish Zlotys, while the men's salary were – 6,000 Polish Zlotys. The most substantial disproportions have been noted in the highest rank of management: women directors or members of boards had salaries recorded to be 10,000 Polish Zlotys, while the men's were set at 13,000 Polish Zlotys (a 23% difference) [Wynagrodzenia kobiet i mężczyzn... 2012].

Common models illustrating this phenomenon of payroll discrimination are: the model of personal biases by G. Becker and the labour market signals theory by M. Spencer.

G. Becker notices personal prejudices against women by employers, co-workers, and clients among other causes of the payroll discrimination. Employers, motivated by their bias against women, offered them lower salaries than male employees while justifying this difference as compensation for psychological suffering endured when working with women. In light of this, an increase in the number of discriminating employers and the incidence of personal biases mean that payroll discrimination for women will only increase. A similar mechanism occurs in the case of co-employees' being bias against women. Employers, by paying lower wages to women, compensate themselves for expenses incurred due to bonuses paid out to male employees, who apparently suffer psychologically when working with women. In regards to clients, differences may arise in terms of prices that clients would be willing to pay when buying goods from men as opposed to women. In the end, this would cause a decrease in revenues earned by enterprises employing the 'softer sex', thus marginal productivities and women's salary [Słoczyński 2008, pages 80-85].

The assumptions underlying the Market Signals Theory by M. Spence are as follows [Spence 1973, pages 356-357]:

- comparing the decision of an employer on whether to hire an employee to buying a lottery ticket (the cost of the ticket equals the salary figure, and the uncertainty of winning is associated with a lack of information on the actual productivity of a candidate);
- employment and the salary level are determined on basis of a candidates' observable attributes covering signals (such as, education, previous occupational experiences, a criminal record, etc.) and indices (age, gender, race, etc.);
- signals depend on a human and may be subject to change depending on investments in education (training courses, additional studies), while the indices are unchangeable;

One of the conclusions coming from such a model is the fact that in conditions of uncertainty, the employer may assess an employer's productivity on the grounds of his/her gender. In other words, when comparing a particular woman and a particular man representing comparable signals, a woman may be deemed as a less productive person, thus she may get a lower salary. The prerequisite (precondition) for the occurrence of such dependence is the employer's conviction of higher men's productivity compared to women's [Ibidem, pages 368-374].

3. From discrimination to equal chances. Gender equality in an enterprise

The breakthrough moment for improvement in women's situation within the Polish labour market was the accession of our country into the European Union. This accession was associated with the necessity to adapt Polish Laws, the economy, etc., to European standards. Poland has signed a number of agreements and declarations, that contain provisions concerning the prevention of discrimination on grounds of gender, also concerning the professional activation of women, support of the women's and men's equal opportunities within the labour market in respect to wages and salaries, and so on. However, the implementation of such solutions requires time as well as many amendments to Polish legal regulations, and the initiative of employers themselves.

The particular role, among the proposals leading to a reduction or elimination of discrimination on grounds of gender, is assigned to the gender equality policy. In reference literature, gender equality is understood as women and the men being attributed to the same social value, equal rights and duties, as well as the assurance of "an equal access to resources (financial measures, chances for development), which they could use" [Polityka równości płci w praktyce... 2006, page 131].

The gender equality policy may be discussed on the State level – gender mainstreaming and an enterprise – gender equality policy.

In the first case, it means "the assessment process of impact of any projected actions (including legislation, policy, pr programmes) in all spheres and at all levels, on women's and men's situation. It is a strategy, according to which the problems and experiences of women and men become an integral element of planning, implementation, monitoring, and evaluation of all policy and programmes in all spheres of the political, economical, and social life, so that the women and the men experience equal benefits, and inequity does not solidify [Report of the Economic... 1997, page 28]. The originality of such an approach to the problem is supported by social and cultural gender determinations in all spheres of the State policy being taken into consideration. Women and men are deemed to be equal beneficiaries and active participants in State development [Polityka równości płci w praktyce... 2006, page 71].

In the second case, according to M. Rawłuszko, it means "the acts of an enterprise contained in the frames of a personnel strategy and aimed at prevention of discrimination and promoting the equality in a workplace" [Przewodnik dobrych praktyk... 2007, page 27]. This definition emphasises two essential elements of such a policy. Firstly, in an enterprise, all employees, regardless of gender, are subject to the same criteria concerning vocational development opportunities, professional duties combining with family ones, remuneration, work assessment, personal dignity protection, etc. The second aspect implicates the formation of an organisational culture of equal opportunities. The inclusion of both elements in the standards of the enterprise operation is a guarantee for the working environment, in which every employee, regardless of gender, remains a valuable resource of the organisation.

The implementation of an equal opportunities policy in an enterprise is a complicated and long-term process equally involving both ordinary employees and management staff, in particular Human Resources Department and human resources managers (Table 1.)

Table 1. The implementation of an equal opportunities policy in the enterprise.

Stages	Actions
Planning and decision making	 Assumption of the vision of the organisation, where the policy for the equal treatment is seen as a strategic investment in the enterprise management; Determination of goals associated with the opportunities equity based on thorough analysis and an assessment of the enterprise's policy, its programs and procedures (an audit from the point of view of the gender equality); Effective announcement of a new vision and targets of the enterprise to all members of the organization; Enabling the opinions and experiences to be exchanged between the lower level personnel and the management staff with use the feedback tool.
Implementation and organisation of actions	 Implementation of solutions that enable monitoring and an impact assessment of the areas in terms of gender, namely: recruitment, employee appraisal, training and development, motivating, promoting, payments, and employees' selection; Training programs implementation that are addressed to the employees, and intended to improve an awareness level as to the various forms of discrimination at a workplace in terms of gender, negative effects of inequity, advantages from the implementation of the enterprise's equal opportunities standards, methods how to manage with barriers, obstacles in creation of an equal opportunities enterprise; Use of specialised consulting companies in the key problems related to the gender equity; The acts in the frames of human resources management function, namely: righteous, clear procedures of recruitment, remunerating and promoting, implementation of possibility to choose flexible forms of employment of those who have children, implementation of parental leaves, encouragement of women-employees participation in external networks of co-operation to utilise and improve their potential, creation of homogenous (female) working groups to promote professional development of women.
Inspection and assessment of the effectiveness of implemented actions	 Necessity of performing of internal audits for the enterprise's situation analysis from the women's and men's situation perspective following the implementation of actions. After every audit, a report comprising conclusions should be issued and made available to all employees; Should these actions do not deliver the results envisaged, they must be continuously modified; Comparison of own actions in the sphere of the equality to the initiatives undertaken by competitive enterprises.

Source: a compilation on the basis of [Przewodnik dobrych praktyk... 2007].

In summarizing the issue of an equal opportunities policy, it can be concluded that the potential economic benefits to an employer mean it is worth looking into.

On the grounds of many case studies, there exists a correlation between the presence of women taking managerial positions in a firm and its profitability. The example are case studies carried out in 2009 and 2010: "Women in Capital Market Companies 2009 and Women in Quoted Companies 2010." An investigation has been carried out of companies quoted at the Warsaw Stock Exchange. It concludes that companies with over 30% of women's participation in the board of managing directors and the supervisory board have more frequently noted nominal growths both in the value of the net sales proceeds and value of assets for 2009 in comparison to 2008, than enterprises having no women in the board of managing directors or having less than 30% of women in the board. It proves the thesis that a greater involvement of women holding the top positions helps the companies to achieve better financial results [Lisowska 2010, pages 3-12].

Secondly, an entrepreneur resigning from diversification in genders of personnel deprives himself of added value which could be contributed by women. I am referencing, inter alia, - different experiences, their values, attitudes, etc. "On the consumers' market, the more the personnel structure of the company reflects the market population structure, the better new market demands may be sensed by it and adapted to." [Przewodnik dobrych praktyk...2007, page 33]

Moreover, among the advantages the following can be identified: minimisation of risk and costs related to the costs of discrimination suits, a positive impact on a source of a company's competitiveness – employees, decrease in a personnel instability (rotation) and associated costs [Ibidem, pages 33-34].

4. Gender Index characteristics

The first step in fighting against gender discrimination within labor market is finding an answer to questions concerning extent, scope, and nature. For this purpose, the equality indexes are used (Table 2).

Table 2. The review of synthetic equality indexes being applied in an international comparative research.

Index	Provided information
Gender – related Development Index (GDI)	• it determines a social and economic situation of respective countries taking into consideration a gender; • it is composed of three main variables calculated separately in relation to women and men in a given country: - life expectancy; - access to knowledge measured in terms of average number of years of education received by inhabitants of 25 years-old and elder and in terms of years of education of people starting education process; - life standard determined according to per capita GDP measured in Power Purchasing Parities.
Gender Inequality Index (GII)	• it characterises the following areas: - health quality measured in terms of a women's mortality rate during deliveries and a birth rate amongst women 15-19 of age; - participation and representation measured in terms of women's and men's proportion in population of at least secondary education and measured in terms of women's and men's representation ratio in official authority structures at the State level; - employment measured in terms of women's and men's activity rate.
Gender Equity Index (GEI)	 it measures a difference in women's and men's situation on basis of available and comparable data at an international level; enables a classification of States in terms of gender inequality index in areas, as follows: education, involvement in the economy and participation in public life.
Gender Gap Index (GGI)	• it is calculated by the World Economic Forum for 130 countries; • determines the difference extents between women and men in the spheres, as follows: economy (wages & salaries, accessibility to positions that require high qualifications), education (accessibility to education, illiteracy), political authorities (representation in decisive structures), health (average life expectancy).

Source: Own compilation on basis of [Human Development Report... 2011; Measuring Inequity... 2012; The Global Gender Gap... 2011]

The Gender Index (the index for equal treatment of women and men) has been developed within the framework of the Gender Index Project implemented in partnership between the United Nations Development Programme and the EQUAL Community Initiative. For the first time, it was implemented in Poland during investigation of companies selected to participate in "The Company of Equal Opportunities 2006", a competition aimed at the distinction and presentation of organisations assuring equal

opportunities to all employees. The application of this index enabled the arrangement of companies in order of determined values relating to equality enjoyed by company employees. In this aspect, the key feature of the index comes forth into view, namely, it is "the synthetic measurement that enables the investigators evaluate, and assign a mark to all investigated organisations in a form of a numerical value, thus creating the space for comparisons and ranking" [Monitorowanie równości... 2007, pages 8-23].

The discussed index is a tool that surveys the organisation areas, which are especially susceptible to discrimination practices and serves as an equal opportunities monitor in the workplace. The research areas analyzed are: recruitment, access to promotions, protection against discharge from work, access to training courses, remuneration for work, protection against sexual harassment and mobbing, and the possibility of combining professional duties with family ones [Ibidem, page 29].

The Gender Index includes 40 diagnostic variables characterising respective areas. The diversified nature of these area requires different methods of processing the various information obtained through questionnaires by the personnel department and employees of an organization (Table 3). In the case of dichotomous features, an enterprise is assigned a value of 1 (when the situation is acceptable), otherwise the value is 0 (zero). In the case of qualitative features of more than two variants, the feature value identifies with an average category. However, in the employees' answers, the adequate fractions of selected answers perform a role of scales when determining an average category [Ibidem, page 32].

Table 3. The Gender Index – diagnostic variables and methods of processing of information.

Diagnostic variable	Methods of processing of information
1. Employees	recruitment
Number of employees by education and gender in the year X.	Indicator showing employee structure by gender and education.
Formalised recruitment rules and procedures.	Value 1 or 0
Announcements regarding employee recruitment – if they include an information on a required gender or family status.	Value 1 or 0
Number of people employed in the year X.	Indicator showing relation of employees accepted to work on base of gender.
Employees' opinions regarding job interviews when they applied for a job in their present company.	Indicator of differentiation in average number of questions given to candidates during interviews and regarding their private life by gender.

Diagnostic variable	Methods of processing of information
2. Possibility	of promotion
Number of employees according to position held and gender, in the year X.	Indicator showing employee structure by gender and position held
Number of employees according to contract agreement and gender in the year X.	Indicator showing employee structure by gender and forms of employment
Number of employees who were promoted in a given year according to gender in the year X.	Indicator showing promotional structure for employees by gender.
Employees' responses to the question of whether over the last year they participated in any training courses, seminars, etc., financed by the company.	Indicator showing differentiation of percentages of women and men participating in training courses and seminars.
Employees' opinions concerning whether they feel employees are often overlooked for promotion on the grounds of gender.	Indicator showing differentiation of women's and men's opinion on how gender impacts promotional opportunities.
3. Protection as	gainst dismissal
Number of employees whose contracts of employment have been terminated by gender in the year X.	Indicator showing the characteristics of the employees' dismissals by gender.
Number of employees returning from maternity leave by gender in the year X.	Indicator showing the percentage of women having been employed at least for one year in the same position before maternity leave in relation to the number of women returning from maternity leave in the year X.
Number of employees returning from child-care leave by gender in the year X.	Indicator showing the percentage of women having been employed at least for one year in the same position before child-care leave in relation to the number of women returning from child-care leave in the year X.
Employees' opinions on whether there have been any cases in the company when an employee returning from child-care leave did not return to his/her previous position held.	Indicator showing the number of persons stating that there have been no cases of an employee not being able to return to the same position in the company after returning from child-care leave.
Employee opinions on whether there have been any cases in the company of bypassing regulations protecting pregnant women and those on maternity leave from being dismissed.	Indicator showing the average opinion concerning changes in work or payment terms or termination of employment with pregnant women or those on child-care leave amongst the all employees filling in the questionnaire.

Diagnostic variable	Methods of processing of information		
4. Available training courses			
Number of employees attending training courses funded or subsidised by the Employer by gender in the year X.	Indicator showing structure of employees attending training courses funded or subsidised by the employer by gender.		
Employees' opinions concerning whether employees are overlooked as candidates for training courses on the grounds of gender.	Indicator showing difference between women's and men's opinions on the impact of gender in designating employees for further training.		
5. Fees and re	emunerations		
Average annual remuneration for women and men according to position held in the year X.	Indicator showing women's-to-men's remuneration ratio according to position held.		
Monitoring the size and relationship of women's and men's remunerations holding identical job positions and whether or not such a system is in place?	Value 1 or 0		
Fringe benefits (so-called bonuses) being offered to women and men by their company, broken down into managerial positions and remaining ones.	Indicator showing percentage employees on maternity and child-rearing leave designated for bonuses as compared to the total number of women to receive bonuses in the year X		
Fringe benefits for employees on maternity and child-care leave.			
Employees' responses to the question of whether the company funds or subsidises training courses as a result of their own initiative, sporting activities, transport, medical care, vacations, and if subsidies, (excluding training courses), extend to family members of employees.	Indicator showing the difference in women's and men's opinions concerning the subsidising of further training or welfare benefits by the company.		
Employees' opinions relating to how employees and their families take advantage of company financing of the above mentioned.	Indicator showing the difference in women's and men's opinions concerning how the subsidising of further training or welfare benefits by the company was taken advantage of.		
Employees' opinions whether gender criterion has any influence on an size of remuneration in their present place of employment.	Indicator showing the differentiation in women's and men's opinions on the impact of gender on the amount of remuneration.		
6. Combining professi	onal and family duties		
Number of full time and part-time employees by gender in the year X.	Indicator showing full- time employees' structure by gender.		

Diagnostic variable	Methods of processing of information
Number of employees working irregular hours (i.e. – contract work, individual work-time schedule or shorten working week) by gender in the year X.	Indicator showing structure of employees working irregular hours by gender.
Whether the company offers nursery or kindergarten services, financial assistance for childcare or rest, allows for family obligations of employees when determining holidays dates – yes or no.	Indicator showing the average number of organized services connected with childcare offered by the company.
Employees' opinions on how often the childcare responsibilities impede their performance of professional obligations.	Indicator showing the difference in women and men employees' opinions concerning the impact of childcare duties on their professional performance.
Employees' opinions on whether the company applies recommendable solutions in facilitating the co-existence of family life and work.	Indicator showing the percentage of people believing that a company employs recommendable solutions facilitating the co-existence of family life and work among employees filling out the questionnaire.
Employees' responses to the question of whether the company funds or subsidises training courses as a result of their own initiative, sporting activities, transport, medical care, vacations, and if subsidies, (excluding training courses), extend to family members of employees.	Indicator showing the difference in women and men employees' opinions on the topic of the company subsidising further training and welfare benefits.
Employees' opinions relating to how employees and their families take advantage of company financing of the above mentioned.	Employees' opinions relating to how employees and their families take advantage of company financing of the above mentioned.
Employees' responses to the issue of whether the company subsidises childcare or education of its employees' children.	Indicator showing the percentage of employees who believe the company subsidises childcare or education of its employees' children according to the employees filling out the questionnaire.
Employees' opinions on the degree of satisfaction concerning solutions applied within a company, facilitating the coexistence of family life and work.	Indicator showing the average degree of satisfaction of employees concerning solutions applied within a company, facilitating the co-existence of family life and work.

Diagnostic variable	Methods of processing of information	
7. Protection against mobbing and harassment		
Information about seminars held at the company concerning equal treatment, preventing mobbing and harassment in the workplace.	The Index expressing an average number of seminars performed at a company in a sphere of an equal treatment by terms of gender equality, sexual harassment, and mobbing.	
Number of employees submitting complaints concerning unequal treatment, sexual harassment, or mobbing by gender in the year X.	Indicator showing the structure of complaints raised by employees by gender.	
Information whether an appointed person/ organized unit is available to receive such complaints.	Value 1 or 0	
Employees' opinions on whether they met with a situation when they were treated worse on grounds of their gender at a present workplace.	Employees' opinions on whether they met with a situation when they were treated worse on grounds of their gender at a present workplace.	
Employees' opinions on whether appropriate measures exist in the company for dealing with sexual discrimination.	Indicator showing the percentage of people, who believe that a company has implemented a program to fight discrimination in treatment of employees and for the equal opportunity of both men and women according to employees filling in the questionnaire.	
Statements by employees as to whether they were ever sexually harassed in the workplace.	Indicator showing the difference in women and men employees' opinions concerning sexual harassment in the workplace.	
Employees' responses to the question of whether the company has implemented a program for victims claiming harassment or discrimination in the workplace.	Indicator showing the percentage of people who believe that the company has implemented a program for victims claiming harassment or discrimination in the workplace among employees filling out the questionnaire.	

Source: Compilation on basis of [Monitorowanie równości... 2007].

The information given in the above Table shows a high degree of diagnostics of the organization areas particularly susceptible to discrimination practices. It allows for the possibility of utilising of the Gender Index at every stage of the implementation of the equal opportunities policy in a company (See: Table 1.)

In the confines of planning and decisions making, this tool may be utilised during an audit from a perspective of a present equality gender policy of a company, its programs and procedures.

In the case of implementation and organisation of actions, the identification of particular areas of unequal treatment on basis of gender will enable implementation of adequate remedies.

At the control stage and for effective assessment of actions being implemented, the index will be useful for in-house audits to analyse a company's situation from the perspective of women's and men's situation after the actions implemented. Moreover, as the Index enables an appraisal of a company in a numeric value form, thus it makes possible comparisons to other companies, enterprises. It enhances a competition and innovation of solutions in the equality sphere.

5. Conclusions

Nowadays, discrimination of employees within a labour market may mean a partial or total loss of benefits derived from their potential work efforts, and may also expose an employer to the possibility of legal costs in case of claims.

The implementation of an equal opportunities policy in an organization is a complicated and long process. It requires the necessity to put all employees into subordination, regardless of gender, and to maintain the same criteria concerning professional development, remuneration, work appraisal, and personal dignity. It also requires the formation of an equality organizational culture. It guarantees the creation of a work environment, where each and all employees, regardless of gender, is a valuable resource of an organization. Moreover, it constitutes a potential source of many economical advantages to an employer.

The Gender Index has been constructed for the needs of policy implementation process. It surveys the areas of the organization, in particular those susceptible to discrimination practices and serves as a workplace monitoring in the sphere of equal opportunities.

References

- 1. D'Amico T. F., *The Conceit of Labour Market Discrimination*, "American Economic Review", 1987, nr 77.
- 2. *Handbook of Economics and Ethics*, (red.) J. Peil, I. Staveren, MPG Books Group, UK 2009.
- 3. Human Development Report 2011. Sustainability and Equity: A Better Future for All, UNDP, 2011, http://hdr.undp.org/en/reports/global/hdr2011/download/, [6.05.2012].
- 4. Kodeks pracy. Po zmianach. Z komentarzem ekspertów. Stan prawny na 1 stycznia 2008r., Gazeta Prawna, Koszalin 2008.
- 5. Konwencja w sprawie likwidacji wszelkich form dyskryminacji kobiet, przyjęta przez Zgromadzenie Ogólne Narodów Zjednoczonych dnia 18 grudnia 1979 r., http://bip.ms.gov.pl/pl/prawa-czlowieka/

- onz-i-prawaczlowieka/konwencje/konwencja+w-sprawie-likwidacji-wszelkich-form-dyskryminacji-kobiet/, [5.05.2012].
- 6. Korzec R., *The Glass Ceiling in Law Firms: A Form of Sex-Based Discrimination*, "Journal of Employment Discrimination Law", 2000, nr 2.
- 7. *LAS KOBIET. Materiały pokonferencyjne*, Stowarzyszenie Kobiet Lasu i Centrum Informacyjne Lasów Państwowych, Warszawa 2010.
- 8. Lisowska E., *Kobiety w spółkach giełdowych i rentowność firmy*, "Kobieta i Biznes", 2010, nr 1-4.
- 9. *Measuring Inequity: The 2012 Gender Equity Index*, Social Watch, 2012, http://www.socialwatch.org/node/14366, [6.05.2012].
- 10. *Monitorowanie równości kobiet i mężczyzn w miejscu pracy*, (red.) E. Lisowska, EQUAL, UNDP, Warszawa 2007.
- 11. *Polityka równości płci w praktyce. PODRĘCZNIK*, Biuro Koordynacji Kształcenia Kadr, Fundacja "Fundusz Współpracy", Warszawa 2006.
- 12. *Przewodnik dobrych praktyk. Firma Równych Szans*, Gender Index, UNDP, EQUAL, Warszawa 2007.
- Report of the Economic and Social Council for 1997, United Nations, New York 1997, http://daccess-dds-ny.un.org/doc/UNDOC/GEN/ N97/265/64/IMG/N9726564.pdf?OpenElement, [6.05.2012].
- 14. Słoczyński T., *Indywidualistyczne teorie dyskryminacji kobiet na rynku pracy*, "Mishellanea", 2008, nr 4.
- 15. Spence M., *Job Market Signaling*, "The Quarterly Journal of Economics", 1973, nr 87.
- 16. *The Global Gender Gap. Report 2011*, World Economic Forum, Geneva 2011, http://www3.weforum.org/docs/WEF_GenderGap_Report_2011. pdf, [6.05.2012].
- 17. *Wynagrodzenia kobiet i mężczyzn w 2011 roku* [2012], Sedlak & Sedlak, http://www.wynagrodzenia.pl/pliki/dla_prasy/86.pdf, [5.05.2012].

Anna Scheibe^{*}

PROSUMER BEHAVIORS IN BRAND IMAGE CREATION

Abstract

A brand remains a considerable source of the competitive advantage. One of the elements contributing to its power is image. The information revolution and globalization make it necessary to search for new means of differentiating brands. One of them is engaging consumers in the brand creation process. In light of the development of the Web 2.0, prosumers – active consumers functioning both as consumers and partly as producers – can have a meaningful influence on the image of brands. Their activities can entail both positive as well as negative effects.

Key words: Prosumer, brand image, social networks, word-of-mouth, cocreation

1. Introduction

In the present economic reality, in the era of globalization and the information revolution, a brand remains an important tool for competing. Its strategic value is determined by the customer-based brand value, which is the ability to make changes in the customer behavior in a way more favorable for the company. One component of this capital is the brand image, understood as a set of brand-related associations that were created in the minds of consumers.

In the face of globalization and wide access to information, consumers can choose from a wide range of brands available in the market, and are constantly being bombarded with information about different brands coming in from a variety of sources. As a result, the differences between the offerings of particular brands are becoming less distinct. Therefore, companies are looking for new ways to create relationships with consumers. One of them is prosumption, where the consumer is involved in the value-creation process. This is arrived at by combining the functions of consumer and producer.

Hence, some activities previously attributed to the manufacturer are passed on to the consumer, resulting in them being able to liberally shape the

^{*} Ph.D., adiunct, Adam Mickiewicz University in Poznan.

values offered by the brand. There are not many studies available covering this phenomenon. The purpose of this paper is to explain not only what can be understood by this term. It is also an attempt to determine the impact that such an opportunity may have on consumers.

2. The concept of prosumer

The concept of prosumer was introduced by A. Toffler in his book "Third Wave" [Toffler 1997]. He describes people who combine consumer and producer functions, meaning that the consumers are taking over some functions previously attributed only to the producers. Toffler writes about the commissioning of work to users or consumers without any recompensation. Thus companies can reduce their level of investment and labor costs. In this context employees in such a relationship are therefore exploited by the companies to quite an extent.

The clear separation of producer and consumer functions was created during the industrial revolution. Afterwards, a clear division of roles began to fade [Ritzer 2010 pp. 1-31]. Initially, consumption had to be completely subordinated to production. Neither the methods of business organization nor the methods of production allowed for too much customization to meet customer demands. Then, with the globalization and information revolution, when hierarchical forms of business organization started to be replaced by non-hierarchical, it also became possible to customize products and services more to the needs of customers. Customers had the option of self-selection in some aspects. The first attempts at transferring some activities to consumers followed and consumers began to perform certain producer functions in return for providing producers with other value (such as faster service or lower prices).

At present, however, this phenomenon is associated mostly in relation to the Internet, where the rise in popularity of Web 2.0 has encouraged the development of such solutions. In cases such as Google, YouTube, MySpace, or Facebook, creating value is not limited to those who are employed by a corporation for the production, updating and maintenance of websites, but also extends to users who get involved in the production [Fuchs 2011, pp. 288-309].

In such networks many forms of presumption can be distinguished:

- Portals, where content is created by consumers and serves the exchange of knowledge such as Wikipedia;
- Social networks, whose main task is to provide communication between users of a network Facebook, Nasza Klasa;
- Blogs- Twitter, designed to transfer information;
- Online Auctions Allegro or E-bay;

- Services such as You Tube, or Fotka.pl for posting mini-movies, or photos and commenting on them;
- Open-source solutions and software, where computer software is created directly by users and made available to others free of charge;
- Sites that collect information about places and giving consumers the ability to mark and select local attractions;
- Geoweb maps which are created or modified by the users themselves [Ritzer 2010, pp. 1-31].

All these solutions are based on co-creation, which means the active involvement of consumers in the value creation processes [Prahalad, Ramaswamy 2004, pp. 5-14]. The success of these types of brands is dependent on the number of users, an increase in visibility, and the way that prosumers contribute to the creation of value offered by the brand. According to Ph. Kotler, what can lead to the popularization of such solutions is an increase in labor costs, the desire to enhance quality, the development of new technologies and the desire for self-development [Kotler 1986, pp. 510-513].

Research shows that prosumers are mainly young people (up to 35 years) who are interested in technical innovations (the group of innovators), and who spend most of their time "on-line", while not paying too much attention to guarding their personal data in the network. What can be observed among them are also some differences, depending on their age, in the way of thinking [Prosumer Report 2012]. Cisco estimates that the number of prosumers in the United States is approximately 4.5% of the general population, and their number is growing by about 9% per year [Gerhardt, 2008, p 2].

The issue at present is to what extent the prosumers may contribute to the creation of brands, the reasons for engagement and if their actions can contribute to the destruction of its image.

3. Brand image

Brand image is a set of associations that are arranged in a meaningful way in the customer's mind. These are associations connected with information about the brand and expectations for products, services, or companies that provide them.

There are many different ways of grouping these associations together. KL. Keller describes image according to the type of associations (what the brand is associated with), favorability of brand associations (positive or negative evaluation), strength (expressiveness of the associations) and uniqueness (qualities that are attributed to a particular brand and thus distinguishing it from the competition) [Keller 1993, pp. 1-22]. Brand image is primarily the result of marketing programs, whose goal is the creation of clear, positive and unique associations with the brand [Keller 2003, p. 70].

A brand's image is formed from both functional and emotional elements associated with a given brand [Palacio, Meneses, Perez 2002, pp. 486-505]. Functional features are related with products bearing one brand and are the basis for making a brand system [Kapferer 1997, p 50]. Emotional values influence consumers' judgments and are associated with distinct positive feelings and emotions connected with the brand.

Brand image is an important element in the brand's equity, forming the basis for gaining competitive advantage. Its role is emphasized in many models, depicting the rules of creating customer-based brand equity. D.A. Aaker lists associations as one of the parts that create brand equity [Aaker 1992, p 29], M. Delamotte explains the sources of brand strength [Delamotte 1997, s.79-85], while Intebrand analyzes the external factors affecting brand value [www.Interbrand.com], KL. Keller gives the dimensions of brand knowledge [Keller 1993, p.1-22], and J.N. Kapferer pays attention to the role of image and brand awareness in the perceived brand value creation [Kapferer 1995, p 31]. Thus, creating a positive image of the brand becomes the basis for the marketing strategies creation of many companies.

Brand image should not be confused with brand identity. Brand identity informs customers what exactly the brand is and can, therefore, be described as a set of information sent out by a company to provide stakeholders with details about the brand and what is available to consumers. Identity includes; ways of communication, visual identity or trademark. Therefore, the identity of the brand determines how the managers of the company would like their brands to be perceived by consumers. For consumers, brand identity is the basis for brand recognition and distinguishing it from competing brands. According to J.N. Kapferer, brand identity consists of six main components (prism of identity), i.e.:

- Physical features characteristic for the brand, often associated with the characteristics of strategic products, such as Sony - Walkman;
- Personality of the buyer ability to describe the brand as a person; the assignment of certain qualities of character, or appearance;
- Customer image the opportunity to express their own self;
- Brand culture the ability to assign specific kinds of behavior to the user, so that the brand becomes a symbol of belonging to a group;
- Reflection of the brand an extension of interest beyond the target group;
- Relations, i.e. relations between people and entities. [Kapferer 1997, p 99].

Company managers should strive for a brand identity (the image that they want to create in the minds of consumers) which is synonymous with brand image (associations actually imprinted in the consumers). However, signals sent by the company are in fact distorted by external factors, which cause a discrepancy between the image and brand identity (Fig. 1)

SENDER	MEDIA		RECEIVER
Brand identity			
Other sources: the ability of competitors to imitate, social expectations	Signals	The activities of the competitors, other interferences (experience, word-of- mouth)	Brand image

Figure 1. Brand identity and brand image [Kapferer 1997, p 95].

Signals sent by a company do not just consist of a promotional message, but include all activities related to its position in the market. So all elements of mixmarketing are taken into account and not just promotional activities.

The interfering factors here are then mainly the actions of competitors and their current offer or promotional activities that can change the mindset and perception of the brand by consumers. Another disturbing factor is consumers' previous experience in dealing with the brand as a result of previous contact with a product, company employees, or any other form of contact. Another element may be the perception of the company managing the brand - association with its mode of action, values, scope, etc. Other factors having influence may be country of origin, distribution channels, or a person, place or events.

The last factor influencing brand image, according to J.N. Kapferer, is the word-of-mouth element. This is information about brand distributed through informal communication channels among the community members. The process may involve many different people and institutions such as local communities, representatives of government and non-government organizations, NGOs as well as potential, actual and former consumers, etc. Nowadays, this factor is becoming especially important mainly because of ongoing developments in information exchange technologies. This id also due to changes in methods of communication both between companies and consumers and between users themselves. There is a rise in the importance of horizontal communication in which exchanges take place not only between a consumer and a company (one-to-one) but also on a "many-to-many" basis [Prahalad, Ramaswamy 2000, pp. 100-109].

Brand image is linked with associations stored in the minds of individuals, which may cause significant differences in the way a brand is perceived by different people. The reasons for such individualizations are the differences in individuals' perception as a result of previous personal experience with the

brand, imagination, personal values, beliefs, and aspirations [Dobini, Zinkhan 1990, pp. 110-119]. Social factors also have great impact on shaping the image of a brand [Coulter, Žaltman 1994, pp. 501-507], rendering the image subject to modification under influence from other participants in the community. Summing up, brand image is affected by a huge number of factors, not all of which a company is able to control.

4. Changes creating a brand

In the present era of globalization and information revolution consumers can much more easily, and at lower cost, locate detailed information on the current market, compare options and choose answers best suited to their needs. As a result, the bargaining power of buyers has increased. Customers are more educated and aware of their choices. Furthermore, with the availability of a large range of products, the distinguishing factors between brands may become hazy as, although clearly different from each other, those differences which distinguish the different brands available on the market may not be discernable. This poses the issue of how to proceed in order to create a clear border between a brand and its competitors. Many possible ways to answer this question can be found.

One suggestion is to emphasize the company's involvement in social welfare creation, which adds spiritual values to the values offered by the brand (in addition to the emotional and functional values) [Kotler, Kartajaya, Setiawan 2010, p 52].

Another way is to place the emphasis on creating strong, partnership relationships with consumers. Only such approaches seem effective in the face of a fluster of information which, as a whole, tends to suppress the effectiveness of promotional messages. A partnership here can be said to be an agreement under which two or more parties decide on collaboration to achieve a common goal without creating a hierarchical relationship. The techniques of creating relationships are related to the whole framework of marketing.

Brand owners are looking for ways to contact the client on multiple platforms. During this information revolution consumers are finding their information not only through official channels under control of specific companies, but also through many unofficial channels produced and managed by Internet users themselves. This fact has significant influence on the decisions concerning the creation of a brand image. Due to Web 2.0. solutions, all signs of a lack of integration in the functioning of the company and the ways of communication can be easily spotted by users. As a result of easy access to information, hostile messages are quickly distributed between network users and damaging the brand image. Therefore, especially now, in the era of the current information

revolution it is important to take exceptional care in maintaining the consistency in the company's marketing communication strategy. This requires not only control over the information sent by the company, but also the influence on the information transmitted by Internet users also or, in other words, the use of viral marketing techniques. To become powerful, a brand has to be "fair" and "faithful" to the vision and values in every aspect of its activity [Kotler, Kartajaya, Setiawan 2010, p 54].

An example of a different brand differentiation concept leans towards mass customization; the distinction of the brand by offering products tailored to individual needs on a massive scale without over-extending the product's price and delivery time. It is also a way to meet the expectations of consumers who, among a wide range of products available in the market, are beginning to seek products carefully personalized to their individual requirements.

Using the latter option is likely to require consumer commitment not only in the purchasing process, but also in the process of creating the product itself. It should also be noted that consumers are willing to take a more active role in the process of consumption. They appreciate the idea of brand co-creation, to express their creativity and build their personality, communicate with other participants in the community, and enjoy some unique and unforgettable experiences. All these factors lead to the development of prosumer behavior.

5. Prosumers in the creation of brand image

According to Ph. Kotler, prosumption attracts consumers who have a high desire to save. They are mainly interested in activities that do not require high skills, long time commitment or effort, but which are providing a high level of internal satisfaction [Kotler 1986, pp. 510-513]. One of the decisive conditions for the acceptance of such solutions is low price. In the case of Internet services referred to previously, the vast majority of consumers do not pay anything for joining the network or for their usage. The introduction of concrete fees may lead to prosumers turning away from a service and lead to a systematic destruction of such brands especially through negative commentary with other users via online channels.

Prosumer behavior can have a clear positive impact on brand image. Positive connotations are associated here between the values offered within the framework of prosumer behaviors. Belonging to this group may mean that being able to obtain a product which exactly matches the needs of a prosumer. This solution adds unique rational values, which form a positive image of a brand. In this case "remuneration" for work carried out by prosumers instead of by the manufacturer has a pleasurable result in that products exactly matching their individual needs would become available. Another reason is the social

recognition on the part of members of the community to which one belongs combined with a willingness to present themselves or to share their knowledge and insights with the community. People define themselves through the prism of connections with social groups or organizations. This often leads community members associated with the brand to engage in so called, collective behavior (e.g., ritual) creating a sense of mutual satisfaction. At the same time they influence the brand image [McAlexander, Schouten, Koenig 2002, pp. 38-54]. This way of thinking can be dominant in social networks in which all content (user profiles) is created by them, as well as portals enabling the exchange of information. Another example is the commitment to specific issues or cases (local patriotism, or even desire to defend your favorite brand). In this case, the reward for their hard "effort" can be the conviction of the rightness of their actions or to doing something good for the idea that they support. What induces this type of behavior may be a sense of identification with the brand, which is the way of perception, feeling, and assessing their affiliation with the brand. The benefits that the consumer may obtain as a result of such cooperation mean that prosumers do not expect to be paid for things they do.

The question arises whether such use of prosumption can negatively affect brand image. Prosumers could indeed in some way feel used by the manufacturer. This might lead to feelings of dissatisfaction and, consequently, to the destruction of the brand's image. In reality resolving this problem seems to be simple, because consumers have a choice and may only engage in those activities that provide them with the desired benefits. This has a positive effect on the level of their satisfaction. But another question arises about the perception of such actions in real life. Here the possibility of a negative reaction to such solutions is more likely to occur. Such actions may pose problem in, for example, a situation where in order to perform certain actions the ability to use technical equipment is required and more time is required in order that the purchaser be able to go through the process of ordering. In such a situation a consumer who is not a proficient user of modern equipment or who finds the time it takes to make a purchase is excessive, may not be satisfied with such solutions. As a consequence this could cause a change in their image of the brand. Such situations may also affect the elderly. who as mentioned earlier are not a part of the typical prosumer group. In that case, it is good to give consumers a choice – they can be served by personnel or choose the right offer on their own.

Offering a possibility of prosumption may create a positive brand image primarily through the creation of the uniqueness of the brand. Currently, when few companies offer the possibility of co-creation, offering such features can lead to the formation of beliefs about the uniqueness of the brand and its innovativeness. This feature may be particularly appreciated in the real world, where few companies can offer the possibility of the co-creation of an offer or mass customization.

In the case of prosumption, there is also the issue of the range of activities that you can entrust to prosumers; the designation of so-called brand limits, which results in the loss of control over the brand. This question may concern, for example, sharing some of their valuable resources with them (e.g. knowledge), which form the basis for the strength of a brand. The problem here may be the direction of the changes that the prosumer will make to the values determined by a given brand. They can create images entirely inconsistent with the manner intended by management. This issue, although it is topical with respect to each brand, in the case of prosumption becomes clearly visible, as consumers not only prejudge the image of the brand, but also influence the brand offer. Restrictions may lead to a reduction in consumer satisfaction, especially since the idea of prosumption is based on freedom and creativity of users [Zwick 2008, pp. 163-196]. In this case, therefore, more attention is paid to the need for coordination, not control. The strength of the relationship between the brand and the users is becoming stronger as the community is more effective in coordinating their efforts and provides the current and future consumers with more information before and after their purchases [Lakhani, von Hippel 2003, pp. 923-943].

A key point underlying the use of prosumption to create a brand image is to engage the consumer. Behavioral consumer engagement including the cocreation, social sharing, interactivity, collaboration and participation [Hoeffler, Keller 2002, pp. 78-89] can build a sense of relationship with the brand, and thus create its image. Prosumption allows you to create live experiences with the brand and reaching out to the consumer through a wide variety of communication channels, which facilitates the creation of strong brands [Joachimsthaler, Aaker 1997, pp. 39-50]. The consumer's belief about the purpose of commitment should therefore have a positive influence on the brand image.

6. Conclusions

This study has also been an attempt to explain the impact of prosumer behavior on brand image. The performed analysis of literature on the subject helped to clarify the concept of prosumer and identify certain areas of the benefits of using the phenomenon of prosumption. The general conclusion that can be drawn is the increasing influence of prosumer behavior on brand image. Prosumption can positively influence brand image, especially in virtual space, mainly due to the uniqueness feeling of creating. The analysis also shows, however, that the phenomenon of prosumption, due to the diversity of the forms in which it can occur, needs further studies. The areas that may be a prerequisite for further research are the limits of the brand; that is the extent to which the consumers may be entrusted to create brand values. Another problem might be

defining the extent of control over the activities of consumers and answering the question whether such control is necessary at all. Finding the answers to these questions may be an inspiration for further research.

References

- 1. Aaker D., *The Value of Brand Equity*, "Journal of Business Strategy", 13/4, 1992, pp. 27-33.
- 2. Coulter R.H., Zaltman, G., *Using The Zaltman Metaphor Elicitation Technique to Understand Brand Images*. "Advances in Consumer Research", 21(1), 1994, pp. 501-507.
- 3. Delamotte M., *Les trois facettes d'une marque*, "L'Éxpansion Management Review", Mars 1997, pp. 79-85.
- 4. Dobni D., Zinkhan G.M., *In Search Of Brand Image: A Foundation Analysis*, "Advances in Consumer Research", 17, 1990, pp. 110-119.
- 5. Fuchs Ch., Web 2.0, Prosumtion and surveillance, "Surveillance & Society", 8(3), 2011, pp. 288-309.
- 6. Gerhardt W., *Prosumers: A New Growth Opportunity*, Cisco Internet Business Solutions Group (IBSG), Marzec 2008.
- 7. http://www.interbrand.com/en/best-global-brands/best-global-brands-methodology/Brand-Strength.aspx
- 8. Hoeffler, S., Keller, K.L., *Building brand equity through corporate societal marketing*, "Journal of Public Policy & Marketing", 21, 1, 2002, pp. 78–89.
- 9. Joachimsthaler E., Aaker, D., *Building brands without mass media*, "Harvard Business Review", 75/1, 1997, pp. 39–50.
- 10. Kapferer J.N., *Les marques, capital de l'entreprise. Les chemins de la reconquete*, Les Éditions d'Organisation, Paris 1995.
- 11. Kapferer J.N., Strategic Brand Management. Creating and Sustaining Brand Equity Long-Term, Second Edition, Kogan Page, Londyn Dover 1997.
- 12. Keller K.L., *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Upper Saddle River, Prentice Hall, 2003.
- 13. Keller K.L., Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, "Journal of Marketing", January 1993, pp. 1-22.,
- 14. Kotler Ph., Kartajaya H., Setiawan I., *Marketing 3.0 : Dobry produkt? Zadowolony klient? Spełniony człowiek*!, MT Biznes, Warszawa 2010.
- 15. Kotler Ph., *The prosumer movement : a new challenge for marketers*, "Advances in Consumer Research", 13, 1986, pp. 510-513.
- 16. Lakhani, K. R., von Hippel, E., *How open source software works: "free" user-to-user assistance*, "Research Policy", 32(6), 2003, pp. 923-943.

- 17. McAlexander J.H., Schouten J., Koenig H., *Building Brand Community*, "Journal of Marketing", 66, January 2002, pp. 38–54.
- 18. Palacio A. B., Meneses G., Perez P.J., *The Configuration of the University Image and Its Relationship with the Satisfaction of Students*, "Journal of Educational Administration", 40(5), 2002 pp. 486-505.
- 19. Prahalad C.K., Ramaswamy V., *Co-opting customer experience*, "Harvard Business Review", January-February 2000, pp. 100-109.
- 20. Prahalad, C.K. Ramaswamy V., *Co-Creation Experiences: The Next Practice in Value Creation*. "Journal of Interactive Marketing, Summer 2004, pp. 5-14.
- 21. Prosumer Report, Euro RSCG Worldwide, 13, 2012, http://www.prosumer-report.com/blog/category/this_digital_life/ [dostep 5.05.2012]
- 22. Ritzer G. Production, Consumption, *Prosumption: The Nature of Capitalism in the Age of the Digital "Prosumer"*, 2010, pp. 1-31. http://www.georgeritzer.com/docs/Production%20Consumption%20 Prosumption.pdf [dostep 10.05.2012]
- 23. Toffler A., Trzecia fala, PIW, Warszawa 1997.
- 24. Zwick, D., Bonsu S. K., Darmody A. *Putting Consumers to Work: Cocreation and new marketing govern-mentality*, "Journal of Consumer Culture", 8, 2008, pp. 163-196.

Andrzej Kozina*

MULTIPARTY NEGOTIATIONS - RESEARCH PROBLEMS FORMULATION

Abstract

The objective of this paper is to identify crucial research problems occurring in multiparty negotiations. The formulation of those problems is necessary to elaborate methodological framework for the analysis of such negotiations, in order to find effective tools of conducting them. Firstly, the general idea of multiparty negotiations was presented, pointing out their features in comparison with typical, two-party (bilateral) negotiations. Secondly, in the subsequent parts of the paper, crucial research problems of multiparty negotiations analysis were characterized, according to the dimensions of complexity of such negotiations, namely: informational and computational, social, procedural and strategic ones. Moreover some potential solutions to those problems were suggested as well. Summing up the paper, the subsequent areas of research were pointed out.

Kewords: business negotiations, multiparty negotiations, features of multiparty negotiations, complexity of multiparty negotiations, strategies of multiparty negotiations.

1. Introduction

The global business environment is highly challenging to the managers of contemporary companies. Numerous, very dynamic and complicated inter- and intra-organizational relations of both competitive and cooperative character result in sharply increasing scope and importance of business negotiations. More and more frequently negotiations involve multiple parties which make it difficult to reach any satisfactory agreement between them. Such negotiations occur especially while establishing strategic partnerships, undertaking joint ventures, forming strategic alliances, performing mergers and acquisitions, creating networks and virtual organizations, maintaining industrial relations, and within other complex transactions, comprising

^{*} Ph.D., Uniwersytet Ekonomiczny w Krakowie, Katedra Procesu Zarządzania.

numerous issues and parties involving considerable risk. The most vital factors underlining the importance of multiparty negotiations are the technological development and substantial broadening of knowledge in many domains of activities, changes in management systems within contemporary companies, mainly decentralization of decision making, and social manner of human nature [Kamiński 2003, pp. 93-94]. Therefore, it is necessary to search for effective methodological tools of analyzing and conducting multiparty negotiations which could facilitate resolving practical problems occurring in such negotiations.

However, it may be observed that despite the key role played by the issue of multiparty negotiations, so far no commonly recognized, complex and coherent methodological concept of those negotiations has been elaborated. Although numerous works on multiparty negotiations have been written, very few authors have attempted to establish such a concept, "...no prior attempt has been made to organize and describe knowledge from the various disciplines represented within this field of study" [Crump, Glendon 2003]. Only partial solutions to selected problems have been suggested, limited tools of analysis applied, and incidental empirical studies carried out, mainly in the field of international relations [Zartman 1994], [Crump 2003], [Dupont 1994]. It is fairly easy to find rules for dealing with negotiations involving two parties and only a few issues; however in real world such negotiations occur very rarely [Watkins 2005, p. 9].

Taking into consideration the weaknesses of the research on multiparty negotiations pointed out above, this paper aims at presenting an author's introductory methodological framework for such negotiations, necessary to elaborate comprehensive research agenda on them. After describing the features of multiparty negotiations, in comparison with two-party ones, major research issues on multiparty negotiations will be identify in the scope of R.M. Kramer's concept, considering four dimensions of complexity in such negotiations, i.e. informational (and computational), social, procedural, and strategic ones [Kramer 1991].

2. The Features of Multiparty Negotiations

Obviously, multiparty negotiations can be defined similarly to two-party (bilateral). Generally they are treated as a process, i.e. a complex venture (project), including many activities by parties interested in reaching an agreement. That process can be characterized by several aspects, reflecting different features of business negotiations. First of all such negotiations constitute an interactive decision making process. At the initial stage of that process the parties formulate their own alternative solutions and criteria for their evaluation, reflecting own

parties goals and interests. Then the parties must adjust both alternatives and criteria to reach common ground. The other important aspects of business negotiations are as follows: conflict resolution and search for an agreement between parties thus creating mutual dependence upon each other, interpersonal communication, mutual exchange of tangible and intangible values, as well as new values creation [Lewicki, Saunders, Barry, Minton 2005, pp. 17-41, [Rządca 2003, pp. 23-25], [Kamiński 2003, pp. 16-23], [Kozina 2012, pp. 21-24].

On the other hand, when it is necessary to negotiate at the same time with more than one partner usually on numerous issues, the form of negotiation differs substantially from that typical for two-party negotiations. Both the number of the parties and relations between them affect the complexity of such negotiations, including all above mentioned processes, characterizing negotiations in general and decision making process in particular.

"Negotiations involving multiple parties are complex because of the potential number of interacting variables. Understanding multiparty negotiation is hindered by a lack of theory that can adequately explain the multiplicity of interactions that typically characterize such negotiations. Negotiation sides, parties and roles are just some of the many variables that interact to produce outcomes. The complexity generated through such interaction is a challenge for theory development" [Crump, Glendon 2003].

Major features of multiparty negotiations, compared to the attributes of bilateral ones are shown in table 1.

Table 1. The Comparison between Two- and Multi-party Negotiations

Feature	Two-party negotiations	Multiparty negotiations
Mutual dependences and relations	Unequivocal, homogeneous, simple and relatively easy to identify and analyze	Equivocal, heterogeneous, complicated, difficult to identify and analyze
Terms (conditions) of potential agreement	Reciprocal acceptance of both parties is required (while making decisions)	The acceptance of all sides is not always necessary and/or possible
Negotiators' behavior	Mutual reactions to one's behaviors	Negotiators' behaviors considers too much broader and multidimensional context
Nature of processes	Communication, exchange and value creation processes within bilateral relations	High complexity of those processes
Potential negotiation strategies	Two basic strategies: cooperative and competitive ones (possibly their different mixtures and combinations)	Greater number of potential strategies of the parties

Source: own elaboration based on [Kamiński 2003, p. 104].

The complexity of multiparty negotiations may be analyzed according to several dimensions, which allows us to identify key research problems in the discussed field.

3. Informational Complexity of Multiparty Negotiations

The first important dimension of the complexity surrounding multiparty negotiations is a result of the considerable amount of differentiating data appearing which set the tone for negotiations in any particular situation (concerning goals, interests, resources etc.) and the desire for it to be included in the analysis. Both objective and subjective difficulties in gathering necessary information and evaluating its effectiveness arise as well as the threat of data redundancy. Informational complexity of multiparty negotiations is accompanied by computational caused by substantial obstacles and limitations in processing, interpreting, verifying, and analyzing information in order to identify and shape particular negotiable situations. Additionally those processes are usually highly complicated and cost intensive [Kramer 1991], [Kamiński 2003, p. 101].

In order to resolve the above listed informational problems from the point of view of all parties, the following steps should be undertaken:

- 1) Introduce a (general) description of the negotiable situation,
- 2) Identify the situation (according to its dimensions see table 2),
- 3) Define the scope of the analysis (selection of parameters describing those dimensions see table 2),
- 4) Determine informational needs (adequate to the scope of analysis),
- 5) Recognition, selection, and quality evaluation of data sources,
- 6) Gather information and verify its usage,
- 7) Group data into topics (sets), reflecting substantial negotiation issues,
- 8) Partial analyses of those issues (market, financial, organizational etc. ones),
- 9) Set together and compare the results of the analysis,
- 10) Elaboration of complex framework for negotiation situation (synthesis).

Table 2. Framework of Negotiable Situation Description

Dimensio	ns	Parameters (features)
Negotiating parties (negotiators or tear representing partic companies)	ns ular	goals, needs, and interests, initial (starting) position, alternative options (solutions) and criteria for their evaluation, scopes and limits of potential concessions, negotiation strategies, styles and techniques, offers (tenders, bids), demands, arguments, questions and dilemmas, views, attitudes, manners, expectations, and desires, competences (knowledge, abilities, capabilities, and skills) available resources (financial, informational, material and non-material), performance possibilities and obstacles (difficulties), strengths and weaknesses (as a summary).
Internal negotiating environment (context)	Relations between parties	 interdependences between goals and interests - convergent (common), divergent (conflict)), and different ones, scope of potential exchange (possibilities and limitations), negotiators' bargaining power, reciprocal relationships (current and forthcoming), possibilities and limitations of negotiations, concerning time, place, technical facilities, audience, participation or other parties and group of interests, e.g. mediators, external pressures, and other factors.
	Domain (process, venture, project etc.)	negotiations subject (object), e.g. specific product and\or service, reflected by quantitative and qualitative attributes, substantial scope of negotiations – issues to be considered in potential contract, specific features of the transaction, e.g. complexity, risk involved, required standards etc.
External negotiating environment	Direct (contrac- tual	Other, potential partners to negotiations (described by the same parameters as the parties): customers (clients), suppliers, subcontractors, cooperatives etc., as well as competitors as necessary view-points (not actual partners)
	Indirect (general)	Including the following factors: • political, economic, social, technological (PEST analysis), • ecological and legal.

Source: own elaboration.

It should be stressed that as a rule, while stating on one's own the features of other parties involved in negotiations only approximate, incomplete and insufficient data describing them and their positions may be available, due to objective limitations.

4. Social Complexity of Multiparty Negotiations

That dimension of complexity reflects both psychological (individual) and sociological (group) aspects of human behavior in negotiations. Potential problems are caused by the large number and diversity of goals, needs, views, expectations, attitudes etc. of negotiating parties, as well as the course of interaction between them. Either individuals' behavior or group processes, such as the group-think syndrome, group polarization and risky shift phenomena, may substantially restrict rational activity within negotiations [Kramer 1991], [Kamiński 2003, pp. 101-102].

Social complexity of multiparty negotiations seems to be the most difficult issue of their analysis. At the preliminary stage of such analysis the activities necessary to perform an analysis, may be perceived from the following three perspectives:

- 1. Individual negotiators it is needful to identify and analyze all crucial features of each participant to negotiations, including both (see table 2):
 - substantial matters issues to be negotiated, goals and interests, negotiation tools: strategies, offers, arguments, techniques, and so on;
 - psychological issues not to be negotiated, but influencing substantial matters, such as: personalities, needs, attitudes, expectations, desires, and so on.
- 2. Entire groups and potential subgroups of negotiators the rules of group forming, their attributes, structures and internal processes, especially interpersonal communication and decision making activities, group roles, interaction between their members, the pros and cons of their performance, and so no.
- 3. Reciprocal interaction between individuals and groups (subgroups) either the impact of individuals on group structures and processes, the matter of leadership in particular or the influence of teams on their members, especially by applying group standards of behavior.

The most important problem to be solved while social complexity of multiparty negotiations is being analyzed is the elaboration and implementation of decision making procedures, mainly the selection of appropriate decision techniques and rules [Rubin, Swap 1994], [Kamiński 2003, pp. 98-100].

It should be added, that for many multiparty negotiators it is not obvious what kind of participants should be considered, i.e. how to define negotiating sides. Therefore wide methodological framework of multiparty negotiation analysis must be included, that comprises the following aspects, the so called "building blocks" [Crump, Glendon 2003]:

- 1. primary party relations (primary parties engaged in a negotiation),
- 2. cooperative relations between parties on the same side (coalitional relations)
- 3. non-cooperative relations inside a "single party" that is not behaving as a unitary entity,
- 4. third party relations (arbiters, mediators, moderators etc.),
- 5. entities providing support to a primary party (agents, experts, advisors etc.).

Including all possible participants to multiparty negotiations, listed above may increase substantially the social complexity of those negotiations, due to the large number and a high differentiation in individual and group features as well as intergroup interactions.

5. Procedural Complexity of Multiparty Negotiations

As far as that dimension of multiparty negotiation complexity is concerned, numerous problems regarding the organization of the negotiations process must be identified and solved. These are the issues concerning elaboration and implementation of proper procedures and rules, referring to the participants of negotiations, their agenda and schedule, their place and territory, manner of conducting discussions and disputes, sequence and time of presentations, and so on [Kramer 1991], [Kamiński 2003, pp. 101, 103].

It may be obvious that the greater the number of parties in a negotiation, the more complicated the process will become. But be prepared for the fact that this complexity affects every aspect of the negotiating process. That is, the joint development of procedural guidelines and ground rules, the provision of opportunities to speak, the scheduling of negotiation sessions, the sharing of information, as well as joint decision making, will all require much more time and concentration than is the case in bilateral negotiations [Hoffman 2010].

It is suggested that the negotiations process be formalized to such extent that the rules and procedures would facilitate that process, without disturbing it, i.e. those regulations should not be too rigorous, providing negotiators with sufficient flexibility. The implementation of a step by step process of stating such regulations is recommended, starting from a general outline of the negotiation process (see table 3), and then gradually make that process more and more detailed and precise by reciprocal activities and alignments of negotiators, concerning subsequent issues. The elaboration of negotiation rules and procedures ought to be completed when the entire agreement concerning those regulations is reached. In order to implement them successfully the tasks and the responsibility of all negotiating partners to perform particular activities within the process must be defined precisely and unequivocally.

Table 3. General description of negotiations process

Sub-processes	Phases (stages)	
Negotiation planning	Identification and pre-negotiation analysis	
	Determining the scope and strategy of negotiations	
	Creation of operational plan (resources allocation)	
Conducting negotiation	Initialization (opening phase)	
	Core (inherent) negotiations (middle phase)	
	Summing up (closing phase)	
Negotiation recapitulation	Contract elaboration and implementation	
	Evaluating the effectiveness of negotiations	

Source: own elaboration.

6. Strategic Complexity of Multiparty Negotiations

That dimension of multiparty negotiation complexity appears to be the most important element. It converges with other dimensions of complexity and results from objective difficulties connected with the classification and selection of a multiparty negotiating strategy and defining the strategy, as well as particular negotiating tools (offer, arguments, techniques) [Kramer 1991], [Kamiński 2003, pp. 101, 103-107].

Taking into consideration the definition and features of multiparty negotiations (see the second part of this paper), the three fundamental criteria to classify their strategies may be used. Each of the criteria allows a distinguishing of two, thus six in total, i.e. three pairs of basic (pure, single-dimensional) negotiation strategies, described below.

- 1. Including *general attitude towards negotiations* (their parties, goals, mutual relations, and context), which is reflected in the traditional concept of integrative versus distributive bargaining [Walton, McKersie 1965], two basis strategies may be distinguished, namely:
 - **cooperative** the negotiator is focused on finding solutions allowing to satisfy all parties' interests, to reach common ground, and looking for potential allies,
 - **competitive** the negotiator searches for solutions satisfying only his own interests, and fends off his opponents,

These are very well-known in literature [Lewicki, Saunders, Barry, Minton 2005, pp. 89-95], [Negocjacje... 2003, pp. 18-28], [Kamiński 2003, pp. 49-92], [Kozina 2012, pp. 123-125].

2. In considering negotiator's bargaining power two pure strategies come to the surface:

- **superiority** (supremacy) when the position of particular negotiator against other parties is relatively strong, he dominates over others, and has many possibilities,
- **inferiority** (subordination) reflecting a weak negotiator's position, subordinated to other parties, and having limited opportunities,

These reflect the actual negotiator's possibility for controlling the process and scope of negotiations by determining other parties' activities [Lewicki, Saunders, Barry, Minton 2005, p. 214], [Rządca 2003, p. 73], [Kozina 2012, pp. 105-106].

- 3. According to possible methods of conducting negotiations in relation to other parties within a group, two basic strategies can be pointed out:
 - individual the negotiator acts solely on his own, but impacting indirectly his partners,
 - common- the negotiator is involved in teamwork, directly and substantially influencing group structure and processes.

The pure negotiation strategies listed above are not sufficient to reflect the complexity of multiparty negotiations. Therefore it is necessary to combine the three classification criteria, i.e. look at those strategies from a three-dimensional perspective, which leads to elaborating eight potential, resultant strategic options – see table 4.

Table 4. Three-dimensional classification of multiparty negotiating strategies

Strategies: (basic $\downarrow \rightarrow$) (resultant X)		Individual	Common	
Cooperative	Superiority	Entrepreneurial [Creator]	Integration (forming coalition) [Integrator]	
	Inferiority	Encouragement demonstration [Supporter]	Accession to coalition [Nexus]	
Competitive	Superiority	Fight [Terminator]	Disintegration (destroying coalition) [Saboteur]	
	Inferiority	Opposition manifesto [Don Quixote]	Accession to adverse coalition [Oppositionist]	

Source: own elaboration.

For each of those eight strategies it is necessary to specify conditions for their effective implementation, i.e. identify and clarify all crucial factors, which enhance the possibilities of the application of those strategies to particular negotiating situations.

The most recommended strategy of multiparty negotiations to be considered is one that is focused on forming a coalition [Dupont 1994], [Vanover 1993].

However, objective difficulties with its implementation are usually met, being caused by limited possibilities and resources, i.e. weak bargaining power, the strategy of accession to coalition seems to be more realistic and promising.

The opportunity for creating coalitions is the substantial difference between bilateral and multiparty negotiations [Negocjacje... 2003, p. 29]. Coalitions make it possible for two or more cooperating parties to achieve desired satisfactory results from a point of view of coalition interests, and not up for negotiating [Polzer, Mannix, Neale 1998]. Unlike formal alliances, the objectives of coalitions are usually short-term and limited to specific issues and interests [Dupont 1994]. Coalitions allow the strengthening of bargaining power of their participants, to such an extent that they may present their own individual offers or at least block other negotiators' proposals, which they find unacceptable [Negocjacje... 2003, p. 29].

7. Conclusions

It should be stressed that the objectives of the study have been met completely. The introductory research agenda for the multiparty negotiation process elaborated by the author and presented in the paper constitute a very useful methodological framework for analysis. By distinguishing and describing key problems occurring within multiparty negotiations, real possibilities of their application to the analysis of practical situations of negotiation have been created as well.

On the other hand, the presented concept is a subject for further research in order to define it more precisely and in more detail. According to the dimensions of multiparty negotiation complexity, the most urgent issues to be investigated are as follows:

- designing effective processes of gathering, ordering, and evaluating of information, enabling us to create complex and comprehensive description of negotiation situation,
- 2) identifying and clarifying both individual and group features of, and intragroup relations within multiparty negotiations, to facilitate the analysis of their social implications,
- 3) creating rational procedures and rules for multiparty negotiations, comprising useful and applicable standards of their performing,
- 4) classifying multiparty negotiation strategies and establishing rules for selecting them and adjusting to particular negotiations situations.

In order to facilitate the implementation of the discussed concept it is necessary to carry out comparative empirical research focused on the verification of that concept.

References

- 1. Crump L., *Multiparty Negotiation and the Management of Complexity*, "International Negotiation" 2003, vol. 8, no. 1.
- 2. Crump L., Glendon A.I., *Towards a Paradigm of Multiparty Negotiation*, "International Negotiation" 2003, vol. 8, no. 2.
- 3. Dupont C., Coalition Theory. Using Power to Build Cooperation, [w:] W.I. Zartman (red.), International Multilateral Negotiation. Approaches to the Management of Complexity, Jossey-Bass, San Francisco 1994.
- 4. Hoffman E., *Negotiating Agreements in Multi-party*, Multi-issue Contexts, "Public Sector Digest, Summer 2010.
- 5. Kamiński J., Negocjowanie. Techniki rozwiązywania konfliktów, Poltext, Warszawa 2003.
- 6. Kozina A., *Planowanie negocjacji w przedsiębiorstwie*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków 2012.
- 7. Kramer R.M, *The More the Merrier?*. Social Psychological Aspects of Multiparty Negotiations in Organizations, [w:] Bies R.J., Lewicki R.J., Sheppard B.H.,(ed.), Research on Negotiation in Organizations., vol. 2, Greenwich, Conn. 1991.
- 8. Lewicki R.J., Saunders D.M., Barry B., Minton J.W., *Zasady negocjacji. Kompendium wiedzy dla trenerów i menedżerów*, Dom Wydawniczy Rebis, Poznań 2005.
- 9. *Negocjacje*. Harvard Business Essentials, MT Biznes Ltd., Konstancin-Jeziorna 2003.
- 10. Polzer J.T., Mannix E.A., Neale M.A., *Interest Alignment and Coalitions in Multiparty Negotiation*, "Academy of Management Journal" 1988, vol. 41, no. 1.
- 11. Rubin J.Z., Swap W.C.], Small Group Theory. Forming Consensus Through Group Processes, [w:] International Multilateral Negotiation. Approaches to the Management of Complexity, W.I. Zartman (red.), Jossey-Bass Publishers, San Francisco 1994.
- 12. Rządca R., Negocjacje w interesach, PWE, Warszawa 2003.
- 13. Vanover M., *Get Things Done through Coalitions*, [w:] Lewicki R.J., Litterer J.A., Saunders D.M., Minton J.W., *Negotiation. Readings, Exercises, and Cases*, Second Edition, Irwin, Homewood, Boston, MA. 1993.
- 14. Walton R.E., McKersie R.B., A Behavioral Theory Of Labor Negotiations: An Analysis of a Social Interaction System, McGraw-Hill, New York 1965.
- 15. Watkins M., *Sztuka negocjacji w biznesie. Innowacyjne podejście prowadzące do przełomu*, Wydawnictwo Helion, Gliwice 2005.

16. Zartman W.I., Two's Company and More's a Crowd. The Complexity of Multilateral Negotiation, [w:] Zartman W.I. (red.), International Multilateral Negotiation. Approaches to the Management of Complexity, Jossey-Bass, San Francisco 1994.

Adrian Pyszka*

SOCIALLY RESPONSIBLE INNOVATIONS (SRI) FROM A TRANSACTIONAL COST PERSPECTIVE - A CHANCE FOR GROWTH AND DEVELOPMENT OR A WASTE OF TIME AND MONEY?

Abstract

This article is devoted to looking at innovations from the perspective of Transaction Cost Economics (TCE) and Corporate Social Responsibility (CSR). In analyzing the substance of the theory the author intends to show the potential challenges that will create socially responsible innovation, especially in combination with transaction costs arising from the need to build relationships with stakeholders. The author puts forward a number of proposals in an attempt to integrate presented solutions indicating the objective of the development and implementation of responsible innovation in modern organizations.

Key words: Socially Responsible Innovations (SRI), Corporate Social Responsibility (CSR), innovation, Transaction Cost Economics (TCE), open innovation

1. Introduction

The theory of transaction-costs is often seen in terms of an exchange of purely economic terms, where the organization interested in seeking continuous improvements through savings resigns from the independent implementation of certain tasks and processes in favor of an external specialist contractor. Such an arrangement is based on outsourcing, which has become one of the most frequently used concept in production and services industries both in terms of local and globally recognized organizations. The popularity of outsourcing is no longer only concerns searching for cost savings through reductions, but also seeking new knowledge, skills and experiences and by cooperating

^{*} Ph.D., University of Economics in Katowice.

with specialized firms, enabling an acceleration in the areas of research and development leading to the introduction of new products to market.

Portraying the idea of socially responsible innovations (SRI) with the internal and outside prospect is the purpose of this study; i.e. transaction costs influencing the process of innovation as well as corporate social responsibility portraying new areas in the search for innovation and costs associated with it. The realization of the goal put forward requires acknowledgement of the assumption that transaction costs have become a relevant aspect in the process of establishing responsible innovations as they are most often connected with the costs of searching for, bargaining, monitoring and coming to terms with partners in exchanges connected with them.

The theory of transaction costs indicated to researchers how companies can gain a competitive advantage by selecting the appropriate mode in realizing their goal of utilizing economic transactions. On the other hand, researchers are paying attention to the behavioral aspects of these processes and especially to the elements of justice in economic exchanges, which may lead to a reduction in these costs [Husted, Folger 2004]. This seems to be particularly important in terms of socially responsible innovation, where costs and social effects of the implementation of ideas are of particular importance for the subsequent commercialization of the developed solutions and generating value.

2. The uncertainty of transaction and its new social conditioning

A. Transition-cost theory

In literature, "transaction cost theory" is seen as a result of the development of a new perception of modern organizations coming out of the mainstream of the new institutional economics, which was in response to criticism of the assumptions of the neoclassical theory of the firm [Paauwe and Boselie 2003], limiting such analysis of a company through the use of the so-called, "Black box" approach. New insights from an institutional perspective led to a revolution in the theory of organizations forcing it to be noticed from a social context (traditions, networks of relationships, pressure control), on which decisions concerning types of resources, as well as negotiation and execution of contracts are based.

Assumptions for the transaction-cost theory (TCE) were created in 1937 by Coasea and developed in 1975 by Williamson, for which both were awarded the Nobel Prize. Coase's classic article, "The Nature of the Firm", expanding the boundaries of firms, pointed to the markets and hierarchy as an alternative regulatory structure, determined by the difference in transaction costs. This

theory was developed by Williamson, who operationalized it demonstrating that you can introduce a testable hypothesis by combining the relative efficiency of alternative regulatory structures (market and hierarchy) of discernible dimensions of a transaction; namely, resource specificity, uncertainty and frequency of transactions. The increase in uncertainty, specific resource and the transaction rate increases transaction costs, which will result in the company desiring to seek to minimize the vertical integration of hierarchical controls instead of using the market.

Some authors studying the theory of transaction-costs [Jones, Hill 1988: Brice, Nelson, Gumby 2011] point to several elements of these attributes: (1) limited rationality - due to the limitations of their knowledge and cognitive processes associated with the information, (2) opportunism - act according to their own interests, the tendency to look for changes in the conditions of the concluded contract, (3) uncertainty / complexity - in a business environment, (4) a small number of commercial relations - the reliance on a single supplier of resources may result from his opportunistic behavior, (5) specific resources - sunk costs in resources-assets that have limited use beyond a single transaction, (6) the impact of information - when one party to a transaction has more knowledge than others, even if it is difficult to estimate the costs of information in connection with uncertainty due to limited rationality and opportunistic activities of parties to the transaction, if the conditions are unknown or difficult recognizable.

As indicated by Geyskens, Steenkamp and Kumar [2006] the fundamental question in the theory of transaction costs is the dilemma: Is the transaction effectively implemented within the organization (if there is vertical integration), or rather outside contractors by the autonomous (market adjustment)? A priori assumption of the transaction-cost theory is the claim that regulation of the market is more efficient than vertical due to the existence of competition, as the transactions carried out within the framework of hierarchical controls are the phenomenon of bureaucracy, which can reduce their effectiveness.

Selection and effectiveness of forms of regulation will be determined by the level of uncertainty caused by the developed technology innovations that may affect an increase or decrease of pressure on vertical integration, depending on whether they are more evolutionary, or revolutionary in character. This situation is associated with difficulties such as identifing information needs, necessary investments in process innovation and the ability to predict the behavior of opportunistic exchange partners [Wolter, Veloso 2008]. The uncertainty in the innovation process increases the transaction costs through the need to renegotiate and renew contracts as a result of haggling and changes in contracts [MacGregor, Fontrodona 2008].

Transaction costs in conjunction with other theories such as new institutional economics "Agency theory" suggests that the essence of a company are concluded contracts and transactions, which are accompanied by bounded rationality and opportunism choice of units, where the company is seen as a management structure and the institutional sphere, through regulation, has an effect on the functioning of the market [Williamson 1998: 30]. Such assumptions underline the importance of cost management, which may involve limiting events occurring before, during and after the transaction. Williamson [1998: 33-35] divides costs according to the moment of their creation into ex-ante and ex-post. Ex-ante costs are costs arising in preparation for the transaction, which include the costs of design, negotiating and securing contracts. Ex-post costs are related to the monitoring and enforcement of the contract terms, which include costs of failure, renegotiating current assumptions and current costs associated with administration as well as other costs.

Another aspect influencing transaction costs is the lack of resolution observed in clinical management Argyres and Liebeskind Porter [1999] and the resulting dependence of the contractors. The inability to separate them is due to two problems; the existing contractual obligations and the bargaining power of business partners. Treating the company as a system of obligations authors suggest two sources of such obligations arising from formal and informal or even illegal contracts. This would result in greater risk and uncertainty including changes in the bargaining power of suppliers, which may change local management mechanisms causing decisions which are contrary to opportunities presented by the market and the company may lose operational flexibility.

In view of the volatility of today's markets, Ghoshal and Moran [1996] also consider the possibility of including in the process the shaping of transactions in a social context, when as they claim, it is those organizations that are not able to create a context needed to build trust and commitment who lose their place in the market. Confidence and learning is just as important in an organizations relation to the market, as efficiency and expediency in the regulation of the market and hierarchical. Lack of trust between trading partners creates conditions in which each transaction must be analyzed and verified, which increases transaction costs to an unacceptable level [Kwon, Suh 2004].

This also applies to the hierarchical mechanism as a regulator, because as shown by Husted and Folger [2004] in the analysis of transaction costs, there is always the issue of a fair assess of any specific exchange of goods and services. The result is that management mechanisms and the feeling of justice are moderated by elements "interactive justice" in relation to the exchange, which means that: (1) in the presence of interactive justice, participants in the transaction positively perceive the administrative mechanism hierarchy to be fair, (2) the greater the perceived injustice of the administration mechanism

hierarchy, the higher the transaction costs generated by this mechanism, (3) the larger the ex-post transaction costs caused by the injustice, the greater the likelihood that the administration mechanism fails. The consequence of injustice in the mechanism of administration will be the need to rebuild or restructure in order to reduce transaction costs.

An example confirming the problems within the context of social dilemmas research is emerging about disconnecting or supply chain integration in a distributed production system fuel sector in Scandinavia. In his research Midtun [2005] demonstrated that compared with the assumptions of transaction costs of corporate social responsibility (CSR) there is a conflict. Standards concerning effectiveness would be at the optimal level for contracting out. On the other hand, taking into account social and environmental issues, a hierarchical integration or long-term alliances more characteristic of high specifics of resources may be better suited. This would result in a reduction of efficiency through the integration of the supply chain-oriented CSR or negligence in credibility as a socially responsible company following the increase in competitiveness through the choice of contracting out. An even greater discrepancy would arise when these two perspectives dictate two different groups of suppliers, creating a dilemma for the trade-off. Midtun [2005] identified three levels to solve this problem in a situation of cooperation with external partners in the supply chain. The first solution is to be fit at the strategic level with partners by forcing certain ethical standards, procedures, and compliance with the CSR at the strategic and operational level. The second is to protect the interests of the company's contracts with partners supported by clauses for both the positive and the negative; positive incentives to accept higher prices in return for carrying out CSR (search for opportunities for innovation), and a negative entry on the compensation for not meeting the CSR (risk management). The third option is to use regulation through cooperation with government regulators establishing appropriate guidelines and regulations in the area of CSR.

In summarizing the following propositions may be included for further consideration:

Proposition 1

Regardless of the type of transaction regulation, the organization must take into account the regulatory environment associated with ex-ante and expost in administering the transaction, to consciously shape the social context and interactional justice in order to build the level of trust and commitment resulting in a decrease in the level of uncertainty and opportunistic actions as well as the cost of transactions.

B. CSR perspective

Corporate social responsibility is often viewed too narrowly, especially by SME entrepreneurs who limit their activity to giving donations to various social organizations [MacGregor, Fontrodona 2008]. It also appears that many companies do not know that compliance with regulations, particularly labor laws and maintaining profitability in business, is also being socially responsible. This means that the vast majority of organizations do not use CSR in a conscious way. In these companies CSR is not utilized as organizational knowledge, an area for learning, not to mention as a source of innovation. Despite this, in their business activities they affect stakeholders by: engaging employees, becoming involved in the local community, undertaking environmental activities, activity within the supply chain, and cooperating with clients. Examples of such activities are shown in Table 1.

Table 1. Percentage and examples of CSR in the SME sector

Areas of activity	Percentage	Description of the CSR activities
Employees	30%	Investment in people and their skills, T&D programmes Building employees engagement Flat management structures Employee newsletters Mentoring, coaching and employee volunteer programs 360° appraisal schemes Social events for employees Work-life balance and family-friendly employment
Community / Society	26%	Work with local schools Donation to lacal cultural and sporting events, sponsoring local sports teams Support local homeless people Support employees to work in the community (time banks) Community engagement programmes
Environmental	23%	Implement ISO 14001 Waste minimisation, re-use and recycling schemes Reduction of use of harmful chemicals Reduction of atmospheric emmisions Use of energy from renewable sources Membership of environmental organisations Investment in new technology Environmental reporting Award-winning environmental schemes

Areas of activity	Percentage	Description of the CSR activities
Supply chain	14%	Open house policy for customers, suppliers and competitors to look around Directorship of business associations Development of long-term partnership with customers and suppliers Supplier learning schemes Measurement of key performance indicators and feedback to staff, customers and suppliers Winners of industry awards Support and encouragement for suppliers to become more socially responsible Participation in industry best practice programmes ISO9001 quality standard
Customers	7%	 Design for all Ecodesign Direct relation and involvement Training programmes Open door day

Source: Own elaboration on the basis of: MacGregor S.P., Fontrodona J., Exploring The Fit Between CSR And Innovation. Working Paper, WP-759, July, 2008

The existing state of awareness of CSR stems not only from lack of knowledge, but also with the underestimating the CSR as an opportunity for companies and sources of value. Companies do not utilize CSR, because they have a problem with priorities; for example in the selection of relevant socially important issues and matching activities in the area of CSR to their business and sales [Grayson, 2010]. Such situations discourage boards of companies from becoming interested in CSR, as it is then viewed more as an additional cost cutting into profits. In many companies, especially SMEs, there is lack of time and people to carry out current tasks. Problems also stem from the lack of integration of new ideas with existing company policies, a lack of understanding the principles and tools of CSR and stagnation in the company [MacGregor, Fontrodona 2008].

In literature, corporate social responsibility is said mainly to refer to its stakeholders and challenges in three different areas; economic, social and environmental. The goal of such an activity should be to minimize the risks and negative impacts and to maximize the opportunities and positive contribution to society and the environment by anticipating future regulations and requirements in the area of business. This implies a different perspective on the concept of managing the organization, which must have risk management and create new value through innovation aimed at addressing social constraints correlated with the existing businesses. This understanding leans toward the perception of CSR as an activity integrated with core activities and competencies of an organization.

According to Porter and Kramer [2006] CSR policy contributes to obtaining the shared value by the ability to fit between the value chain and social dimensions of competitive context. This requires: (1) identifying the points of intersection, the interdependence between a company and society takes two forms: inside-out and outside-in linkages, (2) creating a corporate social agenda, by categorizing and ranking social issues, (3) develop a social agenda to guide the company's transition from a reactive to a proactive stance, the set periodicity and less action, but of greater importance for the company and society, (4) integrating inside-out and outside-in practices by pioneering value chain innovations and addressing social constraints to competitiveness (5) creating a social dimension to the value proposition, a unique value proposition: e.g. a set of needs a company can meet for its chosen customers that others cannot, adding social dimension to the existing strategic dimensions and goals

This issue was addressed widely by Geva [2008] in her research work, which supported the hypothesis that matching business and social activities, as referred to by Porter and Kramer concern decision-making issues managers have to face relating to the various interpretations of existing CSR models on the market, from among others Carroll's[1] well known responsibility pyramid model and the IC (intersecting circles of responsibility). According to Geva, the first model results in the relationship between attention to social issues and deliver profits depending largely on the cultural and institutional context. These relationships are important in placing economic responsibility, as the key responsibility of the company. A surprising fact is the author's assertion that the only "glue" in Porter's model is loss and threat. Subsequently, the IC model, placing equal importance upon all areas of responsibility may cause problems for managers in decision making because they do not indicate any priorities. From the perspective of the problems caused by both models the author has proposed a CON model of responsibility (concentric circle), which integrates all types of liability by placing the responsibility at the center around the economic and other responsibilities (legal, ethical and philanthropic). The CON model establishes for managers the main criterion for decision making to improve social welfare. The main driver in this model is ethics, and ethical values shape the search for opportunities, build organizational systems and decisionmaking of both individuals and groups. In the company all responsible duties are integrated with each other and are not treated like a bunch of independent goals.

Today's organizations are entities with fuzzy boundaries, where management is forced not only to pay close attention to current financial results,

¹ Carroll's pyramid model assumes layered arrangement of responsibilities, starting with the economic, legal, ethical and philanthropic. This model assumes that your first responsibility is to generate a sufficiently high positive financial results

especially to economic costs as a result of decisions, but also consider the social costs that can seriously undermine their image and thus lead to global losses. The current emphasis on corporate social responsibility and focus on running a sustainable business mean that companies are under constant pressure and observation of various interest groups. One such example is the policy of Coca-Cola which met with protests in India. Critics responded that Coke shouldn't be locating bottling plants in drought-stricken areas. Coca-Cola is allegedly responsible for creating problems for communities by creating severe water shortages and polluting the groundwater and soil, destroying farms by draining them out completely. Although the decision on the placement of plants in countries with lower transaction costs seems to be correct, it causes challenges for the pre examination of the impact of the activity to the local ecosystem [Meyer, Kirby 2010].

In summarizing the following propositions may be included for further consideration:

Proposition 2

Creating innovation in line with CSR forces a company to develop relationships with the competitive context in order to use the value chain to seek shared value, which can positively influence the reduction of uncertainty and opportunistic actions, although it can increase transaction costs related to the coordination and monitoring of co-operation with stakeholders.

Proposition 3

The use of CSR in the process of human resource management (i.e. motivating employees), allows the use of new tools such as building relationships, employee volunteering, which can reduce the cost of creating innovative solutions.

3. Perceptions of innovation and socially responsible principles in their design process

A. The essence of innovation

Innovativeness and innovations are currently fashionable and the subject of interest for theories and management. In the continuous search to distinguish themselves, companies attempt to find innovative methods in their operations by spending more money on research and development. On the other hand, management theorists and those from other fields, especially technical, are seeking answers and solutions for creating, deploying and commercializing innovative ideas and their products.

Drucker [2004, p.32] stated that innovation is the specific tool of entrepreneurs, the means by which they change the meaning and value of existing assets. Innovation leads to the implementation of new changes, interests and services. It isn't accidental, but is the result of a purposeful search for entrepreneurs who are not only looking for, but also have the knowledge to grasp the way of successful innovation and its implementation. Innovation can be defined as a process of systematic, purposeful and organized search for changes and opportunities that may result from these changes. Innovation is therefore a process of change; an exploration of ways to create exceptional performance, value and satisfaction obtained from resources by consumers.

In the searching for innovation, we can go beyond the technological or product side, to see it as a process or activity model that enable us to search for different sources of innovation. A curious example is the Innovation Radar developed by Sawhney, Wolcott and Arroniz [2006] demonstrating the 12 dimensions (figure 1) of business innovation companies use in their search, in other words: WHAT (offering) – platform, solutions, WHO (consumers), customer experience, assumed value, HOW (the processes it employs) - the organization, supply chain, WHERE (presence in the marketplace) – networking, brand building. As set out by the creators of the Innovation Radar, Sawhney, Wolcott and Arroniz [2006], business innovation is the search for new value and not just products, to skillfully seek for opportunities and undeveloped areas of the market and customers, and finally a systematic process of exploration and innovation encompassing the necessary elements such as distribution channels. The Innovation Radar indicates the following ways of searching for innovation: developing new products and services, creating derivative offerings; uncovering segments of the market unattended to or underserviced; discovering totally new customer needs or unsupported segments; redesigning customer interaction; redefining methods of payment, services and products; redesigning core operating processes to improve efficiency and effectiveness; changing the form, functioning or activity scope of the firm; changing the way the company approaches supplying and meeting the expectations of suppliers and customers; creating new distribution channels and places where the customer has contact with the product - innovative points of presence; creating network - centric intelligent and integrated offerings; using well-known brands to create other domains of action.

Looking beyond the marketing and functioning definition of innovation we should pay attention to the typology of Henderson and Clark [1990], who identified four types of innovation: incremental (evolutionary), modular, architectural and radical. Incremental innovation is evolutionary, introduces relatively minor changes to an existing product using the existing potential and often reinforcing the dominance of the company. Modular innovation,

such as replacing analog phones with digital ones, is an example of innovative change to the key concept of the project without changing the architectural design. Architectural innovation is the reconfiguration of an ambient system to combine existing components in new ways. The component may change, but does not alter the main concept of the design or engineering knowledge to be used (eg, fan room concept). The other extreme is the radical innovation, which is the contrast based on different assumptions of engineering and scientific principles, opening the market and potential applications. Usually this kind of innovation causes big problems for companies, but can mean a successful entry into a new market or company and thus redefining the industry. This type of innovation refers to the Schumpeterian phenomenon of "creative destruction" as a process of transformation, often accompanied by groundbreaking discoveries. Henderson and Clark [1990] describe this as the product of an innovative application of knowledge into two forms: as a system and a collection of components. In their view, for the success of a product or service two types of knowledge are required: (1) the component, or the key design concepts that made the component, (2) architectural knowledge, or knowledge of how components are connected together and form a whole.

The presented typology of innovations is not exhaustive due to the large accumulation of different types o literature, however, it indicates the nature of innovation and challenges in creating and managing people and their knowledge. In conjunction with the concept of transaction costs, this division specifies the possible impact of actions taken on the direction and degree of vertical integration of activities. Voltaire and Veloso [2008] pointed out that the incremental and architectural innovation will reinforce their competence, modular and radical will be directed to the destruction of existing power to create new ones. In addition, all types beyond incremental innovation, due to transaction costs, will lead to vertical integration.

An interesting way to create innovations is the use of the knowledge of every man, by opening a business on the environment in projects that enable the collective exchange of information. This innovations are called "open innovations". According to Chesbrough and Garman [2010] open innovation allows for the free, bi-directional flow of intellectual property and people between the company and its environment. This movement can be centripetal (outside-in open innovation), where the company utilizes outside ideas and people and centrifugal (inside-out open innovation), i.e. placement of resources or projects outside the company, obtaining the benefits of collaboration and license granted and eventually taking over a well-developing business. This way of creating innovation makes it possible to prevent the negative practices of companies in the form of "hidden innovation on the shelf", developing new products and increasing the chance of a return on investment in R&D.

A well known example of open innovation is the firm, InnoCentive, created and developed by Eli Lilly. InnoCentive is the open innovation and crowdsourcing pioneer that enables organizations to solve their key problems by connecting them to diverse sources of innovation including employees, customers, partners, and the world's largest problem solving marketplace. Their Challenge Driven Innovation methodology, network of millions of problem Solvers, and cloud-based technology platform combine to transform the economics of innovation and R&D through rapid solution delivery and the development of sustainable open innovation programs.

InnoCentive is an example of the use of the idea of "crowdsourcing" [Lohr, 2009], which draw on the knowledge, ideas and inspiration of the crowd, i.e. ordinary people who are employed to solve problems issued by the company and in exchange for interesting solutions are paid their fees, or their ideas are transformed into products. The value of crowdsourcing is formed at the interface of the client organization and the collective knowledge of those interested in a particular solution to a problem that may result in the creation of innovation. Everyone has something to gain. The company acquires engagement of virtual workers, and pays only for results, while individuals have an opportunity to earn money, and to work with major brands and manufacturers.

In summarizing the following propositions may be included for further consideration:

Proposition 4

There is no single correct instruction for creating successful innovation, because it can be either slightly modified products, as well as breakthrough changing the entire industry. Equally important is the process of systematic and multi-dimensional search for innovations, although the more radical innovation becomes, the higher uncertainty and transaction costs, making it necessary to increase the vertical integration.

Proposition 5

The level of transaction costs can be reduced by generating innovations with the use of "collective mind" i.e. alternative forms of acquisition, through open innovations and croudsourcing, using a unique knowledge and skills and increase the relevance of innovation on the market (the level of acceptance and sales of innovative products / services / business models).

B. Socially Responsible Innovation (SRI)

The revolutionary formula of corporate social responsibility changes the picture of today's organizations by introducing the measure, including implementation of innovative models of work, creating a new logic of competition, as well as finding new methods of leadership and redefining business objectives [Hollender, Brenna 2010, p 8]. So called for combining innovation with CSR requires the transformation of an inactive attitude, by a reactive, to proactive, also referred to as creative [Pyszka 2011, p.101]. The shift towards a reactive posture is the first step towards consciously implemented CSR, although limited to the chaotic, short-term corporate identity creation.

MacGregor and Fontrodona [2008] stated that mainly innovative companies use a proactive CSR approach, anticipating future trends and forcing them to other companies in the industry as influential leaders (on a principle similar to the diffusion of innovation). The result of the proactive approach will be searching for fit between CSR and innovation, which can be carried out through the virtuous circle of value presented in the work of MacGregor and Fontrodona [2008] with two kinds of activities: innovation driven by CSR (CSRdriven innovation), and CSR stimulated by innovation (innovation-driven CSR). Creating value in accordance with the model of MacGregor and Fontrodona [2008] will take place in four areas namely: processual, organizational, relational and social. However, innovation will affect CSR from the process sphere, and CSR will stimulate innovations beginning from the social needs analysis. The CSR driven by innovation will launch a process of social stigmata among employees, customers and the supply chain, which can lead to the creation of additional value. MacGregor and Fontrodona [2008] stated that the process of creating a socially responsible innovation requires several steps, i.e. (1) understanding the organization, (2) identify existing state, (3) designing the ideal state, based on strategic plans and expectations of stakeholders, (4) comparing current and ideal state, (5) identifying opportunities and risks, (6) action. Then the process returns to step one assuming the process of learning through experience gained.

Creating a socially responsible innovation may result from risk avoidance, but also seeking business opportunities. By focusing on sustainable and effective results an organization is forced to take steps such as: analyzing the future and current legal requirements of the company (use restrictions as the sources for innovation), sustainable development of the supply chain (reduce the negative impact on the environment and increase cooperation), introduce changes in operating activities (focused on savings), search for new business models (new insights into customer needs, creating new technologies and open innovations), develop new platforms, practices and provide the infrastructure for responsible solutions [Nidumolu, Prahalad, Rangaswami 2010, pp. 62-71].

Searching for opportunities between business and society (CSO - Corporate Social Opportunity), affect the development of activity in the social and ecological sphere, leading to innovation in products and services, new markets

and new business models [Jenkins, 2009, pp. 22]. As pointed out by Bartlett [2009, pp. 418] this is because the models guided by the social needs can lead to remodeling, and even transform a company to meet the needs of society. Such a procedure involves customers and leads to the reconstruction of the organization based on bottom-up innovations and establish relationships with the entities in the social environment of the company, capable of achieving sustainable financial and social performance.

Proposition 5

Socially Responsible Innovation (SRI) require a skilful combination of top-down strategic initiatives, and bottom-up evolutionary, to involve different groups of stakeholders, which may reduce the costs of uncertainty and opportunism, but forcing the hybrid solutions combining regulatory constraints of hierarchical bureaucratic problems in the flow of information between partners.

4. Conclusions

This paper has presented use of CSR from the perspective of TCE (Transaction Costs Economy) as a catalyst in the process of creating innovations, especially in the process of creating innovative business models, which move companies from bloody "red oceans" to "blue oceans" (out of the competition). There is a lack of studies combining CSR, innovations and transactional costs, therefore future developments require factors identification and focus on building bridges between theory, research and practice across the interrelated fields of CSR, innovations and transactional costs.

In addition to the above propositions, according to a transactional-costs economy Socially Responsible Innovations (SRI) have to:

- be sensitive to social needs combined with key business activities or building the knowledge and expertise of the company
- be aware of consequences that may result from this innovations, both used in the framework of legitimate products and services (public and military) and illegal (terrorism, hacking, etc.)
- use the "collective brain" for the creation and dissemination of innovations and commercialization of products and services
- use the CSR to build responsible products, services, processes and business models but in order to circumvent the competitors using "blue ocean" strategy (e.g. Toms Shoes Company)
- use CSR as a tool not only inspiring to new ideas, but also disciplinary stakeholders in order to reduce uncertainty and opportunistic actions,

using positive and negative gain thus allowing the reduction of transaction costs and to motivate contractors to carry out CSR activities Socially Responsible Innovations seem to be an opportunity for creating better innovations with lower costs of implementation, also based on the new forms of cooperation with different networks (alliances, cluster, virtual, etc.).

References

- 1. Argyres N.S., Porter Liebeskind J., Contractual Commitments, Bargaining Power, And Governance Inseparability: Incorporating History Into Transaction Cost Theory, Academy of Management Review, 1999, Vol.24, No. 1, 49-63
- 2. Bartlett D., Embedding corporate responsibility: the development of a transformational model of organizational innovation, "Corporate Governance", (2009) pp.409-420
- 3. Brice J., Millicent Nelson M. White Gunby N., Jr, *The Governance Of Telecommuters: An Agency And Transaction Cost Analysis*, Academy of Strategic Management Journal, Volume 10, Number 1, 2011
- 4. Chesbrough H.W., Garman A.R., *Otwarta innowacyjność: recepta na trudne czasy*, "HBRP" 2010 Listopad
- 5. Drucker P.: *Natchnienie i fart, czyli innowacja i przedsiębiorczość*. Studio Emka, 2004
- 6. Geva A., Three Models of Corporate Social Responsibility: Interrelationships between Theory, Research, and Practice, "Business and Society Review", 2008, 113: 1, 1-41
- 7. Geyskens I., Steenkamp J-B.E.M., Kumar N., *MAKE*, *BUY*, *OR ALLY: A TRANSACTION COST THEORY META-ANALYSIS*, Academy of Management Journal, 2006, Vol. 49, No. 3, 519–543.
- 8. Ghoshal S., Moran P., *Bad for Practice: A Critique of the Transaction Cost Theory*, The Academy of Management Review, Vol. 21, No. 1 (Jan., 1996), pp. 13-47
- 9. Grayson D., *W poszukiwaniu nowej definicji wartości*, "HBRP", Dodatek Odpowiedzialny Biznes 2010 (wywiad Piłat K.)
- 10. Henderson R.M., Clark K.B., *Architecturai Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms*, Administrative Science Quarterly, 35 (1990): 9-30
- 11. Hollender J., Brenn B., (2010), *The Responsibility Revolution: How the Next Generation of Business Will Win*, Jossey-Bass, [w:] Bielewicz A., (2010), Odpowiedzialność 2.0, "HBRP", dodatek "Odpowiedzialny Biznes 2010", s.10

- 12. Husted B.W., Folger R., Fairness and Transaction Costs: The Contribution of Organizational Justice Theory to an Integrative Model of Economic Organization, Organization Science Vol. 15, No. 6, November–December 2004, pp. 719–729
- 13. Jenkins H., (2009), A 'Business Opportunity' Model of Corporate Social Responsibility for Small- and Medium- Sized Enterprises, "Business Ethics" Vol. 18, No. 1, January
- 14. Kwon I-W. G., Suh T., Factors Affecting the Level of Trust and Commitment in Supply Chain Relationships, Journal of Supply Chain Management, Spring 2004, 40,2
- 15. Lohr S., *The Crowd Is Wise (When It's Focused)*,"The New York Times", July 18, 2009, http://www.nytimes.com/2009/07/19/technology/internet/19unboxed.html/? r=2
- 16. MacGregor S.P., Fontrodona J.: *Exploring The Fit Between CSR And Innovation*. Working Paper, WP-759, July, 2008
- 17. Meyer Ch., Kirby J., Leadership in the Age of Transparency, HBR, April 2010
- 18. Midttun A., Dirdal T., Gautesen K., Omland T., Wenstøp S., Integrating Corporate Social Responsibility and Other Strategic Foci in a Distributed Production System A Transaction Cost Perspective on the North Sea Offshore Petroleum Industry, BI Norwegian School of Management, Research Report 11/2005
- 19. Nidumolu R., Prahalad S.K. i Rangaswami R.: *Why Sustainability Is Now The Key Driver Of Innovation*. HBR, Sep2009, Vol. 87 Issue 9, pp.56-64
- 20. Paauwe J., Boselie P., *Challenging 'strategic HRM' and the relevance of the institutional setting*, Human Resource Management Journal; 2003; 13, 3; pg. 56-70
- 21. Porter M.E., Kramer M.R.: Strategy and society: the link between competitive advantage and corporate social responsibility, HBR, Dec 2006,pp. 78–92
- 22. Pyszka A., *CSR jako narzędzie pobudzania przedsiębiorstwa do innowacyjnego modelu działania*, "Współczesne Zarządzanie", 4/2011
- 23. Sawhney M., Wolcott R.C., Arroniz I., *The 12 Different Ways for Companies to Innovate*, MITSloan Management Review, Spring 2006, vol. 47 no. 3
- 24. Williamson O.E., *Ekonomiczne Instytucje kapitalizmu. Firmy, rynki, relacje kontraktowe.* PWN, Warszawa 1998
- 25. Wolter C., Veloso F.M., *The Effects Of Innovation On Vertical Structure: Perspectives On Transaction Costs And Competences*, Academy of Management Review 2008, Vol. 33, No. 3, 586–605

Przemysław Stach* Piotr Staliński** Monika Stawicka***

IDENTIFICATION AND INTERPRETATION OF THE IMPORTANCE OF CUSTOMER SERVICE SATISFACTION FACTORS

Abstract

Customer satisfaction is shaped by their experience over the whole supplier - customer relation cycle, i.e., throughout a pre-transactional, transactional and post-transactional phase, respectively. Customer service is the process that unites all three phases. Therefore planning efficient customer service should be based on the priorities which customers value most in the process and which have the strongest impact on their satisfaction. The literature and practice indicate at least two ways which allow one to establish customer-perceived significance of market offerings' attributes. However, each way leads to a different customer's reality and supports different managerial decisions. Understanding of those alternative ways enables decision-makers to take more appropriate steps and consequently achieve higher levels of customer satisfaction. In this article, we attempt to uncover the implications of alternative procedures to identify customer perceived importance of market offering aspects: stated importance and derived importance. We verify our claims using the data from an exploratory study of personal insulin pumps users.

Key words: derived importance, stated importance, customer service satisfaction, personal insulin pomp user

1. Introduction

While searching for a key to customer satisfaction, many researchers became convinced that it is to be found within a customer relationship cycle, which reaches far beyond the transaction episode. As a matter of fact, it stretches from customers' pre-transactional experience and decisions to the post-transactional

^{*} dr, Wyższa Szkoła Biznesu – National-Louis University, Tarnow Faculty.

^{**} dr, Wyższa Szkoła Biznesu – National-Louis University, Nowy Sacz.

^{***} dr, Jagiellonian University, Krakow.

experience of enjoying the purchased offering. The whole landscape of customer relationship can be successfully planned and controlled using the process of customer service, which is an integral part of the seller's total product. Customer service directly influences perceived quality, both in its functional (processual) as well as technical (expected outcomes) dimensions [Grönroos 1998]. Shaping customer satisfaction through effective customer experience management requires from planners a well-thought emphasis on those areas, which seem to impact customers' attitudes the most. It follows from this that managers must be able to correctly assign priorities and focus their attention and effort on issues, which are believed to have a most significant influence on customer satisfaction.

In the following article, the authors intend to argue for the existence of at least two routes leading to the knowledge about customer-perceived importance of different aspects of a total product. The first one leads through customers' conscious knowledge and their explicit statements, the other one requires analysis of customers' pattern of response to survey questions, which uncovers hidden and unconscious relationships between an offering's evaluation and offering-related level of satisfaction. In authors' opinion, both routes touch upon different realities, and bring potentially valuable observations, provided the collected data are correctly interpreted. The authors' propositions are supported with empirical observations collected during a study conducted on a sample of personal insulin pump users.

2. Customer service satisfaction

Customer service is commonly considered to be one of the key elements of a company's strategy. It is, however, difficult to find a universally acknowledged definition of customer service in the marketing literature. Customer service is context-dependent, and different industries tends to focus on either "soft" elements of seller-buyer relationships or tangible effectiveness indicators of buyersupplier cooperation. Generally speaking, customer service is responsible for delivering a promised offering to the customer in such a way, that at least his or her expectations are met with respect to the time and place of delivery as well as information and activities provided by the seller. It is often emphasized by various researchers that customer service is hardly an isolated episode, rather it is a process which encompasses preparatory (pre-transactional) activities, the actual act of delivery (transaction), and customer support (post-transactional stage). Delta Associates' consultants suggest that during the process of customer service, a company should deliver the offering to the customer honestly, allowing effective (in terms of timely and exhaustive information as well as time, effort, and cost) access to the company's offering, and ensuring that the contact with the seller to is both pleasant and satisfactory [Christopher 2011,p.31-32]. The above

discussion suggests that the effectiveness of the customer service process should be measured by recording and evaluating the level of customer satisfaction with different aspects of the process.

Having conducted a thorough literature study and field research, Giese and Cote concluded that customer satisfaction is a synthetic, affective response of varied intensity to given aspects of purchase and/or consumption (use) of a product. It refers to a certain point in time, and has a finite lifespan [Giese 2000]. From the psychological perspective, satisfaction is a complex process, which encompasses affective and cognitive components. Marketing researchers and scholars usually follow the Expectations Disconfirmation Paradigm, which derives the feeling of satisfaction from the comparison of one's pre-purchase expectations, and the experience with the product purchase and/or use. This paradigm is often supplemented with the "importance" variable, which reflects customers' perceived significance of different product attributes considered in the satisfaction measurement [Kanning 2009]. Thus the level of customer satisfaction is conceptualized as a function of a given set of attributes making up a market offering, each having different degree of significance for buyers and users. There is a common consensus – which seems both intuitively and empirically appropriate – that customers attach different importance to various offering components, therefore those components weigh differently on the level of overall satisfaction with the offering.

3. Stated versus derived importance

Stated importance is defined as an explicit respondent's statement referring to the degree of an attribute's perceived importance. Typical techniques used for identifying stated importance usually include rating, and ranking scales. There are other scales commonly considered as better, though more difficult to use effectively. These include for instance: constant sum scales, Q-sort, paired comparisons, and Maximum Difference Scaling (MaxDiff). They allow researchers to eliminate the fundamental problem associated with stated importance, that is low variability of importance scores within a given set of attributes. Regardless of the technique used to identify stated importance, the assumption of the concept's validity requires satisfying the following conditions [Stark, Scholder 2011]:

- a. factors regarded by the respondent as important should be salient enough to him/her;
- b. the respondent should be sincere with himself/herself;
- c. the respondent should be sincere with the researcher and avoid responding in a socially desirable way;
- d. the respondent should be capable of rational evaluation of the object of study.

Research conducted over the last several decades by cognitive psychologists suggest that the listed assumptions about respondents in many cases are overly optimistic [Nisbett 2007]. After all, respondents may not be completely aware of the things they are asked about by surveyors. One way to minimize the negative influence of individual's imperfect cognitive processes on identifying the importance attached to different attributes of an offering is by uncovering hidden patterns of respondents' responses. This objective can be achieved by putting the concept of derived importance into practice.

Technically speaking, derived importance is a statistical expression of a relation between the offering's attributes (predictive variables) and the overall satisfaction with the offering (a criterion variable). It reflects the magnitude (through the strength of covariance) and the direction with which offering's attributes change together with the overall satisfaction. To express this statistical relation, researchers usually use either bivariate correlation or multiple regression (standardized regression coefficient β). Sometimes the product of the correlation and the β coefficients are used. Table 1 offers a comparison of the concepts of stated importance, and derived importance.

Table 1. Stated importance versus derived importance.

	Stated importance	Derived importance
Advantages	- offers face validity; - offers easy measurement and interpretation; - allows identification of relative importance of offering's attributes for a single customer, and an offering's strong and weak points vis-Ć-vis a competitor's;	 allows relative impact of an offering's attributes (individually and collectively) on overall satisfaction with the offering; does not require the dual-question approach, only rating of attributes; points to key drivers of satisfaction; offers high predictive power;
Limitations	- respondents tend to regard all attributes as equally important; - rating scales (most often used) offer very low discriminant power (in case of ranking scales discriminant power is much higher, however, these types of scales are rarely used for practical reasons); - requires the dual-question approach (i.e. rating of attributes, and stating importance of each attribute); - bias toward attributes perceived as socially desirable; - low predictive power;	- regression coefficients are difficult to interpret due to ordinal scales usually used for measurement; - halo effect; - impossible to identify importance of attributes for a single respondent; - dependent on sample size; - coefficients tend to be unstable (their magnitude, direction, and statistical significance) due to multicollinearity and model identification (adding or removing a variable changes coefficients in regression models); - sensitive to length of scales and violation of normal distribution assumption (correlation);

Selected sources: R. Chu, *Stated-importance Versus Derived-importance Customer Satisfaction Measurement*, "Journal of Services Marketing" Vol. 16/4, 2002; K. Chrzan, J. Kavecansky... 2010, op. cit.

It is important to emphasize that stated, and derived importance constitute in fact an attempt to measure two different realities. They should not be regarded as alternative approaches [Myers 1977]. In essence, derived importance is a measure of determination, where the determinant should satisfy two assumptions: (1) it must be important in the sense of "weighty, momentous, of great consequence, significance, or value" [Myers 1977], and (2) it must change systematically together with the criterion variable. Theoretically, derived importance satisfies both assumptions [1], stated importance only the first one. For this reason, juxtaposing both measures of importance in the so-called dual importance diagram [Grigoroudis 2003] is questionable.

Many researchers lean towards rejecting stated importance, and substituting it with derived importance, arguing against low credibility of the former, rooted in cognitive imperfection and bounded rationality of individuals. However, Chrzan i Kavecansky [Chrzan 2010] convincingly argue against treating both approaches as alternatives, where one is superior to the other. As a matter of fact, they are different methods of reaching different realities of individuals. Each method brings different knowledge, useful only when the researcher realizes which reality he or she is trying to understand, and how this reality is associated with consumer behavior.

4. Different importance measures, different realities

It follows from the earlier discussion that stated importance and derived importance address two different customers' realities — the consciously expressed reality of how "things ought to be", as well as the hidden, only partly realized reality. In his now classic textbooks, Kotler [Kotler 2009] persistently points to the fact that consumer research should not be restricted only to studying the openly articulated, for the explicit is not always truly important. Very often it is the unstated that turns out to be important. The reality of stated satisfaction factors, readily shared with the researcher by consumers due to its mental accessibility, seems to resemble the hygiene factors of Hertzberg's two-factor theory, or the "must-bes" of Kano's model. Low performance in this area tends to lead to customer dissatisfaction, however, no range of investment will boost customer satisfaction. On the other hand, the reality of derived satisfaction factors resemble Hertzberg's motivators or Kano's attractive requirements, which often remain unstated, even subconscious, nevertheless they are responsible for more than proportionate increase in customer satisfaction levels.

Researchers differ in their preference for the way derived importance should be identified. The review of accessible literature and research practices may

¹ Measurement errors and response biases can - and very often do - undermine the second assumption.

suggest that the method of choice is multiple regression. It appears to be able to provide with importance coefficients unburdened with multicollinearity. Yet, considering limitations of the method, as well as rather unrealistic expectations of the lack of interactions among offering's attributes in real life, the choice of bivariate correlation seems more appropriate [Paternoster 2010]. In such a case, coefficients are affected by multicollinearity, but that is what one would expect. It is difficult to imagine an offering which attributes or internal processes are free from mutual interactions, whose direction is sometimes difficult to predict (and usually it is bilateral). Moreover, correlation analysis offers a less "foggy" picture, free from multicollinearity paradoxes of regression models (e.g. positive coefficients become negative after a variable is added or removed from the model). Thus using correlation analysis, derived importance of attributes can be expressed in terms of correlation coefficients (e.g. Pearson's or Spearman's, depending on measurement level and sample size). These coefficients can later be turned into easier to interpret coefficients of determination (r2), after the assumptions about the probable direction of the relation have been made.

5. Importance analysis of customer service attributes- a study of personal insulin pump users

To identify factors perceived as important for customer service satisfaction in the context of purchase and usage of personal insulin pumps, the authors together with one of their master's degree student^[2], designed and conducted a study on a sample of 50 purposively selected diabetics – users of personal insulin pumps manufactured and serviced by one of leading producer of this type of equipment. Subjects were selected on the basis of their active involvement in the insulin pump purchase. The reasons for the industry selection were lack of research in this area, and personal experience with the industry of one of the authors. Data was collected using an internet survey. For the purpose of the study, customer service was defined in terms of a number of customer service attributes associated with pre-transactional, transactional and post-transactional stages of the service process (see table 2). The measurement was performed using seven-point satisfaction scale, which addressed overall customer experience with the manufacturer as well as satisfaction with each single customer service attribute. Moreover, respondents were also requested to rate their perceived importance of each customer service attribute using a stated importance seven-point rating scale. Table 2 presents stated, and derived importance scores, generated using the collected data.

² Authors wish to express grattitude to Dawid Wilczewski, MA for collecting empirical data used in the process of writing this article.

Table. 2. Stated importance and derived importance of service satisfaction factors – personal insulin pump users

Attributes of customer service – personal insulin pumps	Stated importance index	Derived importance		
Payment convenience	117	.52**		
Terms of payment	116	.52**		
Terms of warranty	115	.44**		
Support in obtaining purchasing cost refund	114	.32*		
Timeliness of order completion	114	.43**		
Product repair and maintenance services	114	.33*		
Speed of order completion	114	.41**		
Solving product use problems	113	.31*		
Usefulness of educational materials	112	.67**		
Completeness of order completion	112	.59**		
Ease of submitting orders	112	.49**		
Personnel commitment/willingness to help	111	.53**		
Firm's commitment to diabetes care	110	.52**		
Usefulness of informational material	110	.58**		
Usefulness of training programs	110	.54**		
Personnel's politeness	108	.72**		
Knowledgeability of personnel	106	.73**		
Customer service department performance	105	.49**		
Web site	104	.25 (SI)		
Call center	101	.2 (SI)		
Availability of personnel	99	,73**		
Availability of training programs	94	,44**		
*p<0.05; **p<0.01; SI – statistically insignificant				

Source: Own elaboration using PASW Statistics 18

The table above offers a ranking list of customer service attributes. The attributes are listed in order of their stated importance score. Derived importance coefficients (Spearman's rank-order correlation) are listed to the right of the stated importance score. They reflect the relation between overall satisfaction and the satisfaction with each customer service attribute. Correlation coefficients above 0.7 (strong relation) have been shaded. The outcome of stated importance analysis confirms the common experience of researchers'. The importance indices look "flat" and offer very weak discrimination power. To strengthen the discrimination power, the authors decided to use an importance index instead of average scores. The index has

been built by multiplying scale's numerical values (from -3 to +3, where -3 stands for "completely unimportant", and +3 stands for "very important") by the frequency of responses.

The table contents analysis shows a major discrepancy between both types of importance measures. The results confirm researchers' experience and serve as an empirical proof for the argument of respondents' limited selfknowledge within the area of key satisfaction factors. Respondents tend to consciously attach more importance to "hard" aspects of customer service, whereas subconsciously they emphasize the "soft" attributes. Using rating scales, respondents assign similar weight to many attributes, however, they still tend to regard as more important such attributes as: payment convenience, terms of payment, and terms of warranty. They consciously attached less importance to "human" aspects of the customer service process: availability, politeness, and knowledgeability of the personnel. It is noteworthy, that the latter group seems in fact to exert strong influence on customer service satisfaction. Especially interesting is the case of availability of the personnel. With the correlation coefficient of 0.73, it heads the list of derived importance factors (together with knowledgeability of the personnel), whereas according to the stated importance index, it is a last but one attribute on the attribute importance list.

6. Managerial implications and research limitations

For many decades consumer behavior researchers have warned about the danger of relying exclusively on consumers' conscious statements, especially concerning the importance of product or service offerings' attributes and their impact on customer satisfaction. The authors' study of personal insulin pump users confirms the argument that stated importance and derived importance refer to two different realities. The reality of stated importance addresses customers' conscious expectations and points to those aspects of the total offering which constitute the acceptable minimum in the eyes of consumers. This minimum level is a prerequisite for offering's market success, but it does not that the power to influence customer satisfaction. The analysis of subconscious response patterns brings the answer to the questions what really makes customers satisfied. Very often, the subconsciously voted for satisfaction drivers are consciously underappreciated by customers. It follows from this that to maximize customer satisfaction, marketers should not relay on the articulated, which also turn out to be the unreliable. Rather, they should look for the satisfaction drivers by analyzing the customers reality bypassing their conscious input. One way to do it is by using the concept of derived importance.

The study referred to in the article is based on a relatively small and purposive sample, drawn from an industry which may not share many characteristics with other large consumer industries. Although the research results confirm the authors and most researchers' experience, the problem requires further study, preferably using larger, random samples, within mass market industries. Also, a further analysis of both concepts of stated, and derived importance seems necessary, so that they can be successfully used by market practitioners in their daily operations.

References

- 1. Christopher, M., *Logistics and Supply Chain Management: Creating Value-Adding Networks*, Pearson Education 2011, str. 31-2; Speer J. in The Delta Associates "BizWatchOnline" (http://www.bizwatchonline.com/BWJuly06/article3 0904.htm, last accessed on 04.02.2012).
- 2. Chrzan, J. Kavecansky, *Stated "Versus" Derived Importance: A False Dichotomy*, "MARITZ White Papers", February 2010 (http://www.maritz.com/News-Events-and-Insights/White-Papers.aspx, last accessed on 27.01.2012)
- 3. Giese J.L., Cote J.A., *Defining Consumer Satisfaction*, "Academy of Marketing Science Review", Vol. 4, 2000.
- 4. Grigoroudis E., Spyridaki O., *Derived vs. Stated Importance in Customer Satisfaction Surveys*, "Operational Research. An International Journal", Vol. 3/3, 2003
- 5. Grönroos, Ch., Service Quality: The Six Criteria of Good Perceived Service, "Review of Business", Vol. 9/3, 1988.
- 6. Kanning U. P., Nina Bergmann N., *Predictors of Customer Satisfaction: Testing the Classical Paradigms*, "Managing Service Quality", Vol. 19/4, 2009.
- 7. Kotler Ph., *Marketing Management 8th ed.*, Prentice Hall 1994; Kotler Ph., Keller K., Marketing Management 13th ed., Prentice Hall 2009
- 8. Myers, J.H., Alpert, M.I., Semantic Confusion in Attitude Research: Salience vs. Importance vs. Determinance. [w:] Perreault W.D. (red.) Advances in Consumer Research Vol. 4, Association for Consumer Research, Atlanta 1977
- 9. Nisbett R. E., *Telling More Than We Can oraz Banaji M. R., The Limits of Introspection*, [w:] Brockman J. (red.) *What Is Your Dangerous Idea?* HarperCollins, New York 2007
- 10. Paternoster L., *Stated importance, correlation, regression and key driver analysis*, July, "Research & Publications" 2010 (http://www.instituteofcustomerservice.com/1840-3977/Stated-importance-

- correlation-regression-and-key-driver-analysis.html, last accessed on 29.01.2012).
- 11. Stark R., Scholder T., What Drives Student Choices? Applying Behavioral Economics to Higher Education, "Magurie Associates White Papers", June 2011, http://www.maguireassoc.com/resources/paper-archives/, last accessed on 29.01.2012

II. BUSINESS AND NON-PROFIT ORGANIZATIONS IN A MARKET ECONOMY

Michał Flieger*, Agnieszka Kołodziejczyk**

PRODUCT INNOVATIONS IN PROCESSES OF MATURE NON-PROFIT ORGANIZATIONS - CASE STUDY: A GOVERNMENT DISTRICT OFFICE

Abstract

Public sectors use the benefits which result from innovative solutions that are used in business practice. Implementation of modern management methods can influence functioning of public entities. In the article, barriers for perspectives of proinnovative implementations in the public sector are presented and can be an inspiration for further research. The empirical part of the article characterizes the product innovation in processes of a mature organization based data from a district office taken as a case study. An analysis of public processes in this public entity – Śrem Municipal Office – is presented. Based on the research conducted, conclusions were drawn that the office has reached the highest level of process maturity, and continues to carry out the process of innovative management and knowledge diffusion within the scope of the public sector.

Key words: process management, local office, efficiency, processes

1. Introduction

Methods of public management are often taken and implemented from business practices which becomes the starting point for forming modern day solutions for improving management techniques. In connection with modern economies, these solutions are often joined with deploying information technologies which are being constantly improved. The public sector is characterized by its specific function, and is often limited in terms of possibilities to implement common management methods. Many state-run institutions face the challenge of introducing organizational, information

^{*} Adam Mickiewicz Uniwersity, Poznań.

^{**} Wrocław University of Economics, Centrum Innowacji ProLearning.

technology, and procedural changes. Methods of public management should be tested first, because the public sector is particularly vulnerable to threats and security. The best, innovative practices should be spread over other voivodeships, districts, cities, and public institutions. Districts that function in conditions of growing competition while supporting regional development, should consider the possibility of facilitating their own role. They can bring into effect the best possible practices and make an attempt to implement them as an innovative process.

The goal of this article is to present a modern approach to public management, based on a case study [Kowalak 2009, ps. 77-83]. The district office, which is an example of applying process management at the highest level of maturity, is the subject of this analysis [Nowosielski, 2008, p. 40]. The office is both an example of practical application of knowledge in the scope of improving public administration management and can be considered the best practice for benchmarking comparisons [Camp 1995, p. 1; Czekaj, Lisiński, 2011 p. 50].

2. Areas of innovation in an organization

Innovations in organizational activity are defined as non-continuous undertakings of new combinations of manufacturing factors concerned with launching a new product, a new method of production, opening a new market, obtaining a new source of resources or elements, and carrying out a new generation of business processes. They can be investigated in either a narrow or wide perspective. The first of these means changes in methods of production and in products, based on new or unused knowledge. In the second perspective, innovations are understood as any change in a production process that is based on the assimilation of the knowledge acquired [Leksykon 2004, p. 168]. W. Cellary presents the essence of this innovation as the implementation of a novelty into practice and divides it into:

- a product innovation (launching a new good or service, or significant improvement of one previously offered by a company, with reference to their profile or purpose),
- a process innovation (introducing into practice in an organization new, or significantly improved, methods of production or supply),
- an organizational innovation (introducing a new method of organizing organizational activity, a new way to organize workplaces or a new way to organize external relations),
- a marketing innovation (introducing a new, significantly different than current, marketing methods) [Cellary 2011, p. 43].

In the process perspective, adopted for this article, product innovation is understood as the ability to outdo customers' needs due to the ability to anticipate and decipher market impulses which indicate future needs or their changes. Innovation understood in this way changes the optics of perceiving the public sector, in which functioning of a public entity should base its activity on improving management methods in order to optimize services provided to inhabitants, in this situation – customers.

The newest publications worked out by the Polish Agency for Enterprise Development indicate that development of economy innovation can be also achieved by intelligent market use of resources allotted for fulfilling public needs. According to new trends – a demand approach to innovation (e.g. open-innovation, user-driven innovation), on which the large-scale innovation strategy for Europe is based, the key to support innovations is the public sector. Public administration should give a good example and promote, according to the best value for money rule, realization of the most effective projects [PARP 2011, p. 88]. A supporting element to meet above requirements will be a new method of public management – process management with a special consideration of the product innovation in mature organization processes, with an example of a district taken into account.

Organizational maturity is a part of its lifecycle. According to H. Steinmann and G. Shreyogg the stages of the organizational lifecycle are: birth, growth, maturity, decline, and revival. Individual lifecycles and the intermediates between them are closely connected with the organization skill to adjust to changes of interior and exterior environments [Steinmann, Schreyogg, 1995, p. 274]. Individual stages trigger off specified problems which the organization must face up to. With a reference to a public sector entity, a mature organization is considered to possess the ability to design, generate, create, and implement into practice its own, innovative product, service or management method.

It is assumed that conditions of innovation perspectives in the public sector have specified, indirect stages which are characterized in the figure 1.

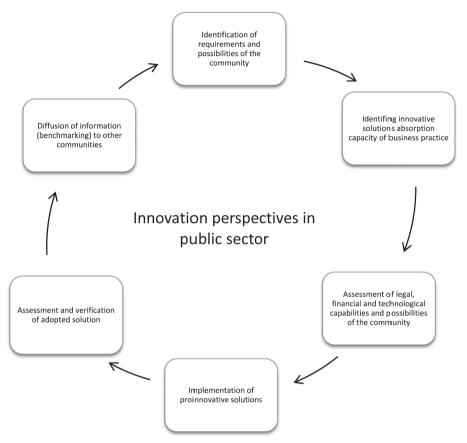


Figure 1. Diagram of innovative process in the public sector. A case study of a district. [Source: own research].

3. Barriers in promoting and implementing innovations in the public sector

For several years research has been conducted in order to identify existing barriers and difficulties in implementation of innovative solutions. The process of adjusting the public sector to present requirements of the market economy is unusually hard in the face of formalized procedures and problems with interpretation. In terms of the characteristic functioning of the Polish public sector attention should be turned to barriers in development of proinnovative tendencies as pointed out by the Polish Agency for Enterprise Development. Most often mentioned are [PARP 2011, p. 89]:

• a lack of experience in the scope of using innovative solutions worked out for the public sector,

- tendency to avoid risk connected with using highly innovative solutions for the public sector,
- adopting short-term policies with a lack of long-term strategy in this area,
- fear of being responsible for unconventional actions based on gaining solutions or products that are not verified by long-term application on the market.
- lack of resources to buy property rights,
- departing from organizing contests, where innovative conceptions are being created,
- incompetence and improper interpretation of the law or improper use of regulations.

The above research results indicate that difficulties of pro-innovative attitudes in the public sector arise due to financial limitations, attitudes and knowledge, execution of the law, and activities of individual bodies. In order to overcome the above mentioned barriers special programmes and projects are setup which include training sessions, integration of the business environment with the public sector, and knowledge diffusion between individual bodies and entities. The case study, presented in this article, can be used to diffuse the knowledge to other public sector entities, minimizing the risk of using unverified solutions. Results of the empirical research indicate a copybook (best practice) example of how a public sector entity can function.

4. Product innovation in the processes of a mature organization – case study

Process management is based on description, mapping, selection, and optimization of processes of an organization in order to increase efficiency and effectiveness of actions carried out by a particular organization [Zimniewicz 2009, p. 99-103; Perechuda, Szrednicki, Cieśliński 2000, p. 43]. The innovation process in an organization consists of several stages: the appearance of a new idea, its transformation into a concept, implementation and improvement, delivering a new or modified product (service) to customers, consumer survey and searching for new solutions or modifications according to the results of the survey. During the carrying out of these stages, a significant flexibility in the process of managing the organization must dominate [Bogdanienki, Kuzela, Sobczak 2007, p. 62-63]. From a product innovation perspective, one of the goals of a process approach is flexibility in matching a product to changing needs of internal and external customers of an organization [Prudzienica 2009, p. 92-94]. Such matching can condition the innovation in two ways – at first, defined as a current flexibility which means

a quick reaction to changes on the market. By accepting the speed of actions, a process organization can act more efficiently than rival organizations and be perceived as innovative by its customers^[1].

In order to achieve the product innovation, described above, the process organization must achieve process maturity in all carried out processes, including those connected with offering products [Bobera, Władyka, Zawicki 2004, p. 49]. A detailed analysis of product processes of the public organization, the district office in Śrem, will be presented below. According to the results of the research conducted, this district office has reached the highest level of process maturity^[2]. Additionally, the Śrem district is the leader of social-economic growth in the Wielkopolskie Voivodeship so its processes can be regarded as a model and, as the best practices, can serve as a benchmarking reference for other districts [Flieger 2011, p. 21]. It is an example of practical experiences in the scope of management which allows for the use of theoretical knowledge of process management in practice. In order to get detailed information, the authors carried out interviews with representatives of the Śrem district office authorities.

4.1 The process of organizing social assistance

The main product of the district office activity are social assistance services. They are very important because they directly affect the level of living conditions in the district area and influence the level of inhabitants' satisfaction^[3]. In the scope of social services, the first process is the organization of social assistance. In this case the starting point of the process is the law: the Social Welfare Act, the Family Benefits Act, the Strategy of Social Welfare in Śrem District for 2007 – 2013 years, other trade acts, and the budget for a given year.

The course of this process is based on the Social Welfare Centre carrying out social assistance programmes in the district. An analysis of this activity examines the scope of the services provided as set out by the Social Welfare Act including:

- services covering tutelary and specialist services,
- services in terms of widespread supplementary feeding programmes,

¹ One should remember that innovation can be subjectively perceived against the background of competitors. In this way organizations that positively stand out from others can be perceived and can perceive themselves as innovative. It is often enough to achieve a competitive advantage.

² A research method adopted by the authors in order to choose the process matured office was the questionnaire worked out in the scope of the Institutional Development Programme. See: J. Bobera, A. Władyka, M. Zawicki, Katalog Narzędzi Rozwoju Instytucjonalnego, Cracow Economic University, Cracow 2004, ps. 38-39.

³ One should remember about a political aspect of local authorities activity. Inhabitants satisfaction has a direct influence on reelection and their current support for the district actions.

- housing allowance benefits,
- temporary & special allowance benefits,
- family allowance benefits,
- · advances of maintenance payments benefits,
- childbirth allowance,
- other social assistance.
- covering the ZUS social insurance fees,
- monitoring homeless levels,
- actions to support disabled and mentally handicapped people.

Once a year, until the end of March, the Śrem Social Welfare Centre submits a report on its activity to the Town Council. Conclusions drawn from these reports are the basis for establishing initiatives for the following year. This process is connected with the process of financial politics and the process of fixed assets management. The measuring tool for this process is the number of people who receive assistance compared to the total number of district inhabitants.

4.2 The process of organization of public education

The second process is organization of public education. The starting point for this process is the Education System Act, the Teacher's Charter, other trade acts, and the budget for a given year. The course of this process is presented in the following way and organization of public education bases itself on:

- analysis of the data presented by the directors of educational institutions in the form of organizational datasheets in accordance with the procedure of optimizing a school network,
- organizing transport for pupils in the district area that requires tendering out in order to satisfy the demand as reported by the directors of educational institutions,
- ensuring the financial means necessary to enable the performance of educational tasks the adoption of the district budget for the following year,
- the setting up and liquidation of district educational institutions as deemed necessary,
- assessment of educational services supplied by other than the district,
- ensuring proper housing conditions in accordance with the procedure of investments planning. Once a year (until the end of June) an analysis of petitions filed concerning renovations
- performance assessment of teachers entrusted with the post of the director of educational institutions

- financial analysis for additional financing for training junior workers at a period set out by KO
- providing material assistance of an educational character
- performance assessment of directors including consideration of incentive bonuses
- promoting part-time teachers to the rank of full-time
- initiating an open competition for the position of director of an educational institution
- raising external resources for the realization of educational programmes
- supporting talented youths according to currently functioning school regulations
- keeping records of public & nonpublic institutions the analysis covers
 the entire school year and is to be submitted to the Town Council up
 until March 30th every year.

The process is carried out by educational institutions run by the Śrem district or others – in the case of public & nonpublic institutions. Conclusions drawn from the analysis of these reports form the basis for planned actions in the following school year. This process is connected with the process of financial markets, the process of fixed assets management, the process of carrying out competitive tendering, and the controlling process. The number of pupils who receive support (e.g. study allowances and school allowances, layettes, scholarships) compared to total number of pupils in the district, and the percentage of the considered motions for external resources are the measures of the process.

4.3 The process of organization of prophylaxis and healthcare

Another process in the scope of providing public services concerns organization of prophylaxis and healthcare. The starting points for this process are the trade acts, the Prophylaxis and the Alcoholic Problems Programme in the Śrem District, the District Programme for Preventing Drug Abuse, and the budget for a given year. The process is as follows: the organization of prophylaxis and healthcare is carried out by PEU according to demands including those of the Prophylaxis and the Alcoholic Problems Programme, the District Programme for Preventing Drug Abuse, and the Mayor's Directive concerning the budget for a given year.

Analysis includes:

- performance assessment of the addiction treatment facilities
- assessment of the process of processing submitted applications

- methods of supplying therapeutic assistance to district inhabitants
- assistance networks for the homeless
- youth and teenage support programmes
- legal assistance for district inhabitants
- organization of feeding programmes for the needy

Each year, at the end of March, an analysis is carried out based on reports. The monitoring process includes control checks and conclusions are drawn up, which form the basis for creating a prophylaxis programme for following years. The measuring tools are: the number of therapeutic treatments (therapy for addicts, co-addicts, psychological advice), the number of meetings for legal advice, the number of children and youths involved in the therapeutic programme, and the percentage of success cases compared to the number applying for assistance.

4.4 Organization of the process of cultural and sport services, and tourism

The last process in the scope of social services is the organization of cultural services, sport services, and tourism. The starting point for this process is: Acts covering cultural activity, the Public Libraries Act, the Museums Act, and the budget for a given year. The process appears as follows: organization of cultural & sport services, and tourism is carried out by cultural institutions, the Średzki Sport Company, and others including institutions. Monitoring is done based on an analysis of factual and financial reports which are submitted each year, up until the end of March. In the PEU a record of cultural institutions is kept. The process is connected with financial markets, the process of fixed assets management, and the process of carrying out competitive tendering. The measuring tools of the process are: the number of cultural and sport events, which are organized by cultural institutions and ŚOSiR, and the number of these which are supported by the Municipal Council in Śrem.

5. Conclusions

The research results presented in this paper confirm that process management leads to an increase in the efficiency of processes carried out in public entities as well as an increase in the quality of products and customers satisfaction. It also causes improvement of the district competitiveness which has particular significance in the aspect of stimulating social-economic growth [Swinburn, Goga, Murphy, 2000, p. 8; Rogoziński 2008, p. 18]. The described product process of the public organization, the Śrem

district office, is a copybook example of a process to be implemented in other public entities as a modern form of management. The Śrem district office carries out this innovation process in 5 stages::

- 1. Locating innovation possibilities in the district and its surroundings.
- 2. Preparation transforming processes into innovations for purposes of analysis and assessment.
- 3. Assessment opinion and report on the results of actions and possibilities of implementing the innovation.
- 4. Realization innovations deployment in the district.
- 5. Measure assessment of the factual results of innovations deployment.

One should draws one's attention to proper use of scheduling of the measure and assessment of individual processes over a year [Stewart, 1991, p. 43; Burkette, Hedley, 1997, ps. 46-49; De Villiers, 1997, ps. 285-300]. The dates of analysis and reports concerning each of the processes are not the same so that the same level of importance is maintained. Thanks to maturity of the process, there is the possibility to deploy and use product innovation and modern organizational methods in the public sector as well.

In the situation where innovative solutions in public entities are used, changes occurring usually have an intra-institutional character. However, results of their deployment have significant influence in streamlining relations and processes within a given community.

References

- 1. Bobera J., A. Władyka, M. Zawicki, *Katalog Narzędzi Rozwoju Instytucjonalnego*, Cracow Economic University, Cracow 2004
- 2. Bogdanienki J., Kuzela M., Sobczak I., *Zarządzanie wiedzą w warun-kach globalnej współpracy przedsiębiorstw*: collective work Toruń: Adam Marszałek Publishing Company, Toruń 2007
- 3. Burkette G.D. Hedley T. P., *The Truth about Economic Value Added*, CPA Journal, Vol. 67, No. 7, July 1997
- 4. Camp R. C., Benchmarking *The Search for Industry Best Practises That Lead to Superior Performance*, in: A. Rolstadas, *Benchmarking Theory and Practice*, Chapman&Hall, London 1995
- Cellary W., "Innowacyjność i nauka to nie to samo czyli jakiej innowacyjności potrzeba w Polsce?, Opening conference for the project "Enterprising PhD student – investment in innovative development of the region", Wrocław 2011
- 6. Czekaj J., Lisiński M. [ed.], *Rozwój koncepcji i metod zarządzania*, Cracow Economic University, Kraków 2011

- 7. Flieger M., *Usprawnienia systemu zarządzania jako źródło przewagi konkurencyjnej gmin*, Przegląd Ekonomiczny, No 2/2011
- 8. Grudzewski W. M., Hejduk I. K., Sankowska A., Wańtuchowicz M., Sustainability w biznesie czyli przedsiębiorstwo przyszłości. Zmiany paradygmotów i koncepcji zarządzania, Poltext, Warsaw 2010
- 9. Kowalak R., Benchmarking jako metoda zarządzania wspomagająca controlling przedsiębiorstwa, Wrocław University of Economics Publishing, Wrocław 2009
- 10. Leksykon zarządzania, Difin, Warsaw 2004
- 11. Nowosielski S., *Procesy gospodarcze w organizacjach*, in: *Procesy i projekty logistyczne*, [ed.] S. Nowosielski, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław 2008
- 12. Olszewska B. [ed.], Wybrane metody zarządzania współczesnym przedsiębiorstwem, Wrocław University of Economics Publishing, Wrocław 2008
- Pacholski L., Trzcieliński S., Koncepcje zarządzania przedsiębiorstwem, Institute of Management Engineering of Poznań University of Technology, Poznań 2003
- PARP, Conference Materials [in:] Popytowe podejście do tworzenia innowacji, Klub Innowacyjnych Przedsiębiorstw, Polish Agency for Enterprise Development, Wrocław 2011
- 15. Perechuda K., Srzednicki A., Cieśliński W., Zarządzanie procesem jako instrument doskonalenia efektywności przedsiębiorstwa, in: Zmieniające się przedsiębiorstwo w zmieniającej się Europie, [ed.] W. Wawak, t.3, Jagiellonian University Publishing, Kraków 2000
- Prudzienica M., Podejście procesowe w zarządzaniu innowacjami, red: S. Nowosielski, Prace Naukowe UE we Wrocławiu, Wrocław 2009
- 17. Rogoziński K., *Sfera publiczna fundamentem sektora usług publicznych*, in: *Zarządzanie usługami publicznymi*, [ed.] B. Kożuch, Scientific Society of Modern Management, Cracow 2008
- 18. Steinmann H., G. Schreyogg, *Zarządzanie. Podstawy zarządzania przedsiębiorstwem*, Wrocław University of Technology Publishing, Wrocław 1995
- 19. Stewart G. B., *The Quest for Value*: A Guide for Senior Managers, Harper Business, New York 1991
- 20. Swinburn G., Goga S., Murphy F., *Podręcznik Lokalnego Rozwoju Gospodarczego*. Produkt sieci Miast Przemian, LEDPrimer_PL.pdf., 2000

- 21. Zarządzanie wiedzą w warunkach globalnej współpracy przedsiębiorstw: collective work / edited by Jerzy Bogdanienka, Marcin Kuzel, Iwona Sobczak. - Toruń: Adam Marszałek Publishing Company, 2007
- 22. Zimniewicz K., Współczesne koncepcje i metody zarządzania, Polskie Wydawnictwo Ekonomiczne, Warszawa 2009

Regina Lenart*

ABSORPTIVE CAPACITY OF SCHOOLS

Abstract

This article presents the concept of absorptive capacity as the potential to identify, assimilate, recognize the value of external knowledge. The aim of this article is to present the results of expert interviews with principals of primary and secondary schools. The study was conducted in schools located in Silesia in 2011. It was noted that the absorptive capacity contributes to building a competitive advantage for schools.

Key words: absorptive capacity; dimension, factor, school

1. Introduction

Changes in the economy which were a result of the country's transition also contributed to the adoption of the September 1, 1999 educational reforms. The aim of these reforms was not only to create a new type of school, but to also implement new rules for financing public schools and establish a new system of supervising them. In addition, the Lisbon Strategy set the objective of member countries to improve the quality and effectiveness of education, facilitate universal access to education systems and open up education to the local environment.

According to the reforms in education, schools must not only fulfill the functions of teaching and educating, but also to ensure optimal conditions for the development of society, to shape young people's attitudes and skills that will enable the fulfillment of the tasks in the future of society. The school has become a local center of culture, lifelong learning and active citizenship. In line with the Lisbon Strategy, the school should build on innovation, value of foreign experience and business experience in the field of organization and management.

In other publications, it is assumed that each school is subject to market forces and thus is capable of self-discovery, understanding its problems, improving and learning from mistakes made as well as successes [Bednarska-Wnuk, 2010]. With knowledge and a learning imperative the organization

^{*} mgr Uniwersytet Ekonomiczny w Katowicach.

becomes effective in the face of change [Rokita, 2003], acquires the ability to solve problems of survival under conditions of uncertainty [Krupski, Niemczyk, Stanczyk-Hugiet, 2009].

The implementation of public services, a drop in the birth rate, the response to social needs, a transparency in activity and performing of functions has led to schools needing to become competitive and possess skills that will contribute to the efficient use of resources, including: the ability to absorb externally generated knowledge [Stanczyk-Hugiet, 2007], as competition is lobbying for the skills and competencies [for: Czakon, 2007].

The purpose of this paper is to present the essence of absorptive capacity in regard to schools. The first part presents the essence of absorptive capacity. The second part presents the results of empirical studies on the absorptive capacity in schools.

2. Absorptive capacity

Capacity is defined as the potential of action, "regardless of its praxeologic characteristics, and so the level of efficiency" [Czakon, 2007]. Ability occurs when an organization recognizes its capabilities and resources. An organization that has ability is one, with accumulated skills and resources, that can reach specific objectives in such a way that it distinguishes itself from the competition. It knows how to do something and is able to do it.

H. Cohen and D. A. Levinthal in *Absorptive capacity: A new perspective on learning and innovation* (1990) initiated an interest in research on the absorptive capacity of an organization. This work in the years 1980-2011 was cited in 31 publications. Since 1990 many scientific publications have been written on the subject. They examine the theory behind absorptive capacity, however there is no empirical research.

In recent years, some attempts have been made to redefine this concept towards competitive advantage [Grant, 1996], organizational learning [Dyer, Harbir], the response to the presence of knowledge in organizations [Lane, Koka, Pathak, 2006], the development of innovation in an organization [Jong, Freel, 2010] building a competitive advantage, innovation and knowledge management. The issue of absorptive capacity of an organization has also been addressed by Polish management theorists [Czakon, 2007].

The absorptive capacity of an organization was originally defined as the ability to identify, assimilate, recognize the value of external knowledge [Cohen, Levithal, 1990], and the ability to use knowledge found in the surrounding environment and utilized for commercial and economic purposes. It is also the ability to develop a set of organizational procedures

and processes that can help the organization acquire, learn, process and exploit knowledge in order to obtain dynamic organizational capacity and problem solving ability [Kim, 1998]. In defining knowledge, the transfer of knowledge and its importance, the process of learning in organizations, learning to interact, changes in the environment, the absorbance factor of an organization were all taken into account. It is one of the fundamental learning skills that enable you to identify knowledge and information outside the organization, their assimilation, internalization and usage for market purposes. It depends on basic knowledge (table 1).

Table 1. Definitions of absorptive capacity

Date	Autor	Definitions	Perspective
1965	J. H. Adler	Absorptive capacity is the ability of an economy to utilize and absorb external information (or knowledge) and resources	Macroeconomic
1989	W. M. Cohen, D. A. Levinthal	Absorptive capacity is the ability to identify, assimilate, and exploit knowledge from the environment	Adjusted the concept to the organizational context
1990	W. M. Cohen, D. A. Levinthal	Absorptive capacity is the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to achieve commercial ends	Redefined absorptive capacity as representing a single-loop learning
1998	P. J. Lane, M. Lubatkin	Relative absorptive capacity is the ability of a firm to learn from another firm through a studentteacher pairing approach, called a learning dyad	Distinguished three dimensions of absorptive capacity: 1) the ability to recognize and value external knowledge; 2) the ability to assimilate new external knowledge; and 3) the ability to commercialize new external knowledge
1999	F. A. J. Van den Bosch	Absorptive capacity comprises evaluation, acquisition, utilization of new outside knowledge	Developed a more integrated framework of the co-evolution of a firm's pathdependent absorptive capacity and the knowledge environment
2002	S. A. Zahra, G. George	Absorptive capacity is a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge	Reconceptualized absorptive capacity as a dynamic capability of a firm, which consists of potential absorptive capacity (acquisition, assimilation) and realized absorptive capacity (transformation, exploitation)

Source: own work.: M. Easterby-Smith, M. A. Lyles, Handbook of organizational learning and knowledge management, Blackwell Publishing Ltd, Oxford 2003, pp. 278.

Lane and Lubatkin (1998) have developed the notion of relative absorptive capacity. They have reconceptualized the firm-level concept of absorptive capacity as a learning dyad-level structure, arguing that "the ability of a firm to learn from another firm is jointly determined by the relative characteristics of the two firms" [Lane and Lubatkin, 1998]. Van den Bosch et al., [1999] have developed a more integrated framework of the co-evolution of a firm's path-dependent absorptive capacity and knowledge environment. They argue that Cohen and Levinthal's implicite feedback loop is dependent on the environment in which a firm competes and on its success in coping with this environment. When the business environment changes, the firm will respond to this situation, and if its response does not work as expected, the firm will try to improve it. The ability to accept new units of outside knowledge depends on the level of knowledge held by the organization. However, this is not sufficient. Absorptive capacity is closely linked to management structures and systems of social relationships. Apart from basic knowledge, there is a need to develop organizational units referred to as a combination of possibilities, integration of stakeholders in the processes of organizational learning, which will enable the organization to use the basic and the 'new' knowledge [Kogut, Zander, 1992].

3. The Determinants of Absorptive Capacity

Absorptive capacity is non-material and is not directly observable, so it is difficult to measure. It is not constant, so you can influence it. However, it may be identified by factors that affect her. A study carried out by Lane et al. [2002] concludes that the determinants of a firm's absorptive capacity have only been scarcely examined. Of these few studies, Daghfous [2004] has provided an overview of the determinants of absorptive capacity which have mainly been derived from the work of Cohen and Levinthal [1990]. The determinants of absorptive capacity (table 2) can be broadly categorized into two groups: internal and external factors. Internal factors include the prior knowledge base, the level of education, the presence of gatekeepers, and investments in R&D. External factors contain the interaction with other firms.

Table 2. External and internal determinants of absorptive capacity

Determinants	Autor			
Internal				
Prior related knowledge	Cohen, Levinthal [1990]; Nonaka, Takeuchi [1995]; Waalkens [2006]			
Level of education	Rothwell, Dodgson [1991]; Vinding [2000]			
Gatekeepers	Vinding [2000]; Gradwell [2003]			
Firm's size and age	Sorensen, Stuart [2000]; Liao et al. [2003]; Avermaete et al. [2003]; Lee, Sung [2005]			
Investments in R&D	Cohen, Levinthal [1990]; Veuglers [1997]; Vinding [2000]			
Organizational structure	Kogut, Zander [1992]; Van den Bosch et al. [1999]			
External				
Interaction	Ghoshal, Bartlett [1988]; Levinson, Asahi [1995]; Steensma [1996]			

Source: own work: A. Daghfous, Absorptive Capacity and the Implementation of Knowledge-Intensive Best Practices, SAM Advanced Management Journal 2004, nr 69, s. 21-27.

Cohen and Levinthal consider the level of prior related knowledge as the determinant of a firm's absorptive capacity [Cohen and Levinthal, 1990]. According to Kim [1998], a prior knowledge base is the sum of all individual units of knowledge within an organization. Prior related knowledge has a positive effect on a firm's absorptive capacity because it determines the level of a firm's ability to perform three principal activities: to acknowledge the value of the new knowledge, to assimilate it, and to apply it for commercial ends [Cohen and Levinthal, 1990].

According to Vinding [2000], the employees' level of education is another determinant of absorptive capacity. The more education and training individuals have received, the higher their ability to assimilate and use new knowledge. As a firm's absorptive capacity depends on that of its organizational members, the level of education and training of these individuals has a positive influence on the level of the absorptive capacity of this organization [Schmidt, 2005].

The presence of so called 'gatekeepers' plays an important role in determining absorptive capacity [Daghfous, 2004]. Vinding [2000] states that the gatekeeper, whose role it is to create a language that can be understood by all different departments and parties involved, can improve a firm's absorptive capacity through knowledge sharing.

Daghfous [2004] claims that size can affect a firm's absorptive capacity. Larger firms with sufficient R&D resources are likely to be more innovative than smaller firms, which in most cases have only limited R&D capacities. This situation suggests that a firm's innovativeness (the outcome of absorptive

capacity) and its size are positively correlated. In their study of high-tech firms, Lee and Sung [2005] indicate that size as measured by the number of employees, is significantly related to R&D activities, which are often used as an indicator to measure a firm's absorptive capacity [Cohen and Levinthal, 1990]. A study by Liao et al., [2003] however, suggests that compared to large organizations, smaller firms are better capable of responding to changes and introducing innovations, because these organizations have less bureaucracy and their business culture is less hierarchical.

In studying absorptive capacity Cohen and Levinthal [1989] mainly focus on the role of R&D expenditures. They also point to the dual role of R&D in the innovation process of firms: realizing absorptive capacity and generating new knowledge and innovations. Many authors use R&D to model absorptive capacity at the firm level. Daghfous [2004] argues that investments in R&D have repeatedly been found to play a critical role in the improvement of the skills of the employees. The relationship between R&D spending and absorptive capacity seems to be bi-directional [Daghfous, 2004]: absorptive capacity influences the direction and intensity of R&D [Vinding, 2000], while the R&D investments in turn affect the efficiency of absorptive capacity [Daghfous, 2004]. It has also been argued that the absorptive capacity of a firm is determined by its expertise in stimulating and organizing knowledge sharing (Van den Bosch et al., 1999).

Daghfous [2004] states that a firm's organizational structure and its cross-functional communication can improve its absorptive capacity [Van den Bosch et al., 1999; Lane and Lubatkin, 1998]. Furthermore, in order to improve absorptive capacity, the organizational structure should be flat, flexible, adaptable, dynamic, and participative [Daghfous, 2004]. In addition, Gradwell [2003] points to the strong positive influence of close networks and relationships within firms on the transfer of tacit knowledge.

Initially, the question of the impact of environment on the organization was ignored by research [Lenart, 2011]. Thus, researchers believed that the organization does not have to interact with the outside. With time, the organization was defined as a system strongly determined by their surroundings. However, an organization is defined by the element of a given system, so it interacts with other elements. Researchers indicate that interactions with the outside is known as the 'outer cognitive economy' [Nooteboom, 1992], relationships with other members of the network of knowledge [Caloghirou, Kastelly, Tsakanikas, 2004] are one of the main factors that influence and stimulate the development of new products, organizational processes, the absorptive capacity of the organization, and in particular the ability to recognize the value of new knowledge and its reception.

4. Absorptive capacity - empirical findings

The aim of this study was to answer the impending question: what factors influence the absorptive capacity of schools. The object of the study were public and private schools. According to art. 2 of the Act on the Education System of 7 September 1991 (Journal of Laws of 2004 No 256, pos. In 2572, as amended.) the education system includes schools: primary, lower secondary and upper secondary. According to the definition adopted by the Central Statistical Office, a school is an educational unit established on the basis of the memorandum or entry in the records - by the government, local authority, legal or natural person under the provisions of the education system Act.

Selection of the education sector as a research facility is not accidental. Polish schools operate under the provisions of the Act and the Education System of 7 September 1991 on the education system (Unit text of Acts. Laws of 1996 No. 67, item. 329 as amended.) And the regulations issued thereunder. There are certain tasks and objectives of schools: Allowing students to gain knowledge and skills necessary to obtain a graduation certificate enables them to make informed choices for further education or choose a direction for their future profession as well as shape the educational environment conducive to realizing the objectives and principles set out in the Act, according to the terms schools and age groups. The choice of education as a field of research was supported by the fact that it has been honored by the World Bank as one of the pillars of economic development and potential indicators of the knowledge economy. Thus, investing in education contributes to output growth, interest of foreign investors, technology development, economic growth, human capital training in preparation for working life, and thereby contributes to economic wealth, social welfare and political stability. Schools in the environment are seen as serving organizations, internally bureaucratic, inefficient and very varied externally, and providing public services [Ansoff, 1985].

OECD studies show that knowledge in education is heterogeneous in nature - which means decreasing the ability of this sector to generate knowledge. The education sector is spending too little money on R & D. It has a very low awareness of the idea of knowledge management and rather pursues the idea rather minimally. Cooperation of specialists from various fields was also assessed to be at a low level. Interaction between novices and experts mostly runs to a small degree and very little cooperation is undertaken within the network. Cooperation with extensive exterior networks has not been developing and very little has evolved in terms of collaboration between public and private sectors. The relationship between the schools is judged to be weak and there is little use of modern telecommunications technology in the transmission of knowledge.

As well the mediation process and implementation of new knowledge lags at a slow pace. In addition, the OECD points to the low efficiency and performance of education systems [Education at Glance 2010].

For the study, the author concluded that knowledge of external and internal factors affecting the absorptive capacity contributes to; the ability to take decisions concerning the diagnosis, assessment, assimilation and acquisition of new knowledge, as well as the ability to gain difficult to imitate by competitors knowledge that is essential for creating a competitive advantage, the ability to respond to signals emerging from the environment and the needs of stakeholders and satisfying their needs at the highest level. In order to verify factors of absorptive capacity - in late August and September 2011, an empirical pilot study in schools in the province of Silesia was conducted. The research was exploratory in nature and is the basis for model verification research and access to further research on the issues of absorptive capacity in schools. The objectives of research and the need for the assembly of value of empirical material revealed a range of qualitative methods (expert interviews). The decision to choose the methods and techniques was dictated by the objective of the study and the need for expert review of the literature mentioned factors, the absorptive capacity.

The author wanted to explore the theme of which was not subjected to detailed examination. The research project carried out requires the use of a diverse research lab. For this purpose, in-depth interviews will be done. Using qualitative methods can provide us with a "deeper" understanding of social organization from a perspective of their actors [Silverman, 2009]. The selection of subjects for the interviews was done at random. This meant that each subject was given a number and the numbers were then read out in a fixed sequence as they were selected randomly from a table. The range of choicee included schools from the province of Silesia, while the list was constructed based on data contained in a public educational information system.

Due to the size of the population, the purpose and scope of the research project, it is necessary to separate it into separate parts. The research will be conducted in the province of Silesia. The number of students and schools are some of the factors that affect the validity of research in this region. The main indicator of demonstrating the current status of education in the region is the number of students in the type of educational establishment. Primary schools consist of 8.98%, middle schools 10%, and secondary schools 11.64% of all schools of this type in Poland. Figures concerning number of students passing external examinations are as follows (2011 data): professional examinations in technical schools: 61.64% (national average 62.9%), vocational school exams: 72.66% (national average 80.80%), secondary school exams: 91.35% (national average 62.90%), Matura (Matricular) exam: 76% (75% national average).

The importance and relevance for research in the province of Silesia is part of the adopted "Strategy for the Development of the Silesian Province ŚLĄSK 2020", which aims for a high level of education and skills for its citizens by taking action to improve the quality of education. In the context of this strategy its worth noting emphasizing that they intend to adapt school facilities to the dynamic changes occurring in the environment and socioeconomic situation. These elements and the importantrole Silesia plays on the educational map of Poland underlines the importance of carrying out research in this region. The experts in interviews conducted were the directors of primary, middle and secondary schools. A total of ten interviews were done with school principals, who represented these organizations: primary school, middle school, secondary school.

The changes in the education system have also affected the change in the role of the school. Many authors point to a change in the concept, which involves treating the school as an administrator for the school-manager [Fazlagić, 2009; Law, Glover, 2003; Elsner, 2005]. This approach is also presented in the Regulation of the Minister of National Education of 27 October 2009 on the requirements, which should correspond to the person holding the position of Director and other executive positions in various types of public schools and the types of public institutions (Journal of Laws No. 184, item . 1436). Under the regulation, the school principal may be a person who is a teacher and does not have any professional training. However, he must possess a degree in management, ie college, university or graduate degree in management or qualification course in management education. On the other hand, the required five years of teaching as a teacher can be considered interchangeable with five years of service, including at least two years of work experience in a management position (§ 5.1., Pts. 3).

On behalf of the Ministry of Education Education Development Centre (public-service teacher training facility run by the Ministry of Education) conducted in the period from February 2011 to July 2011, a study under the project "Improving education management strategies at the regional and local level". One of the recommendations of the study is the building of a new education system for school heads such that the principal takes on the role of public manager: "Noteworthy is the lack of prior experience by persons taking on the position of principal. Construction of a new system of training and development based on experience, for example, management studies, would better prepare the person making key decisions for the school" [The report The Situation and the professional status of schools and educational institutions, 2011, p 25].

Literature indicates that it depends on the public manager's efficient and effective management of the organization at a high level [Sheepskin, 2005]. Thus, a change in the role of school management refers to contemporary challenges and means the need to adapt and increase the quality of education at schools. There are changes in the role of school heads as there is a need to implement management functions. Literature indicates that it is the management team that contributes to the absorptive capacity of the organization by making decisions on investment in R & D and linking external sources of knowledge [Cockburn, Henderson 1998], and also in providing information [Lenox and King, 2004]. Management also affects the process connected with knowledge [Van den Bosch et al., 2003]. Directors / managers can enhance the organization the importance of learning and are helpful in absorbing new technologies and practices [Cohen, Levinthal, 1990].

Individual interviews were conducted according to a previously prepared scenario containing a total of five open-ended questions. The way of formulating the questions in each case was matched to the type of the enterprise concerned, and moderated in the course of that conversation with the respondent. Each interview lasted 45-90 minutes, and its behavior was recorded using a digital voice recorder. All collected material was subjected to empirical scrutiny. A transcript was prepared, and obtained qualitative data analyzed using NVIVO 9th Respondents answered questions concerning: associations related to the absorptive capacity of knowledge, learning styles, schools, communication with third parties, factors affecting the absorptive capacity and were asked to identify barriers to the acquisition of knowledge.

School administrators asked for associations connected with the concept of absorptive capacity on the identified most often: finding new solutions (60%), exchange of experience (20%), absorptive (10%), adapt to new realities (4%), the integration of new knowledge to the school (2%), triggering creativity in students and employees (1%), development of school (1%), schools adapt to new demands of the environment (1%), easy flow of information (1%).

Another question concerned the definition of absorptive capacity. For more than half of school principals, the absorptive capacity of knowledge is the potential and willingness to acquire and apply new knowledge in practice, the adoption of knowledge from various sources, the sharing of knowledge. However, it should be noted that in the group a third of the study population defined absorptive capacity as the creation of conditions for acquiring knowledge. Very few respondents (2%) indicated an openness to new knowledge. In the next stage school principals were asked to identify ways of learning in school. Figure 1 presents the most frequently mentioned factors absorptive capacity.

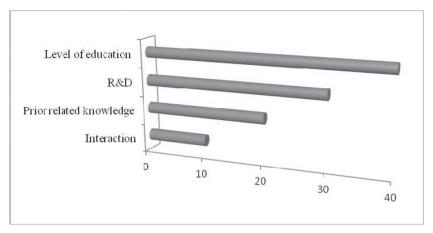


Figure 1. Internal and external determinants of absorptive capacity [Source: own work].

School principals pointed to: skills and qualifications (40%), education projects (30%), the knowledge possessed by a school (20%), cooperation with the environment (10%). Only one school principal also pointed to the size of the school as an important factor in capacity. In his opinion, a large facility can not cope with the acquisition of knowledge.

It is worth noting that the lack of funds was, in addition to legal and organizational changes and resistance to acquiring external knowledge, cited as one of the major barriers to the absorptive of knowledge. In addition, school facility managers pointed to the lack of procedures for acquiring knowledge (30%), poor infrastructure (20%). One of the respondents stated that the acquisition of external knowledge is not useful in an educational establishment. Limited financial resources to a large extent limit the development of knowledge. The difficulty in obtaining financial resources, complicated procedures for submitting grant applications cause reluctance school principals to enter into the procedure of raising funds. In addition, the duration of waiting for results, and high turnover of teaching staff contribute to this reluctance.

5. Conclusions

Absorptive capacity contributes to the learning organization, its innovation, maintaining a competitive advantage in the market, follow the latest trends, absorptive of new technologies, as well as the speed of adaptation to change, generate economic value, and facilitates strategic decision-making. This is important if you need to locate the school in terms of competition and the declining birth rate.

Although the survey was a pilot, and his aim was to verify the factors affecting the absorptive capacity - it helped to understand the determinants of absorptive capacity. It is therefore necessary to conduct further research to explain and identifiable external and internal factors of absorptive capacity, and further provide school managers with the knowledge of external and internal factors and the development of absorptive capacity for decision-makers, authorities conducting and supervising school guidance on absorptive capacity.

References

- 1. Bednarska-Wnuk, *Zarządzanie szkołą XXI wieku*, ABC a Wolters Kluwer business, Warszawa 2010.
- 2. Cohen W. M., Levinthal, D. A., *Absorptive Capacity: A New Perspective on Learning and Innovation*, "Administrative Science Quarterly" 1990, nr 35, s. 128 152.
- 3. Cohen W. M., Levinthal D. A., *Innovation and Learning: The Two Faces of R&D*, "The Economic Journal 1989, nr 99, s. 569 596.
- Czakon W., Dynamika więzi międzyorganizacyjnych przedsiębiorstwa, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2007, s. 240.
- 5. Czakon W., Lenart R., *Zdolność absorpcyjna wiedzy jako czynnik skuteczności międzyorganizacyjnego uczenia się*, "Prace i Materiały Wydziału Zarządzania Uniwersytetu Gdańskiego" 2011, Sopot.
- 6. Daghfous A., Absorptive Capacity and the Implementation of Knowledge Intensive Best Practices, "SAM Advanced Management Journal" 2004, nr 69 (2), s. 21-27.
- 7. Elsner D., *Kierowanie zmianą w szkole. Nowy sposób myślenia i działania*, Centralny Ośrodek Doskonalenia Nauczycieli, Warszawa 2005.
- 8. Fazlagić J., *Zarządzanie wiedzą w polskiej oświacie. Diagnoza i perspektywy rozwoju*, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań 2009, s. 52.
- 9. Kożuch B., *Specyficzne cechy organizacji publicznej* (w:) *Z teorii i praktyki zarządzania publicznego*, red. Kożuch B., Markowski T., Fundacja Współczesnego Zarządzania, Białystok 2005.
- 10. Krupski R., Niemczyk J., Stańczyk-Hugiet E., *Koncepcje strategii organizacji*, PWE, Warszawa 2009, s. 80.
- 11. Lane P. J., Lubatkin M., *Relative absorptive capacity and interorganizational learning*, "Strategic Management Journal" 1998, nr 19(5), s. 461-477.

- 12. Rokita J., *Dynamika zarządzania organizacjami*, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2009, s. 131.
- 13. Rokita J., *Organizacja ucząca się*, Wydawnictwo Akademii. Ekonomicznej w Katowicach, Katowice 2003, s. 84.
- 14. Schmidt T., *Absorptive capacity: One size fits all? Firm-level analysis of absorptive capacity for different kinds of knowledge*, ZEW Discussion Papers 2005, nr 05-72, s. 1-18
- 15. Silverman D., *Prowadzenie badań jakościowych*, Wydawnictwo Naukowe PWN, Warszawa 2010.
- Stańczyk-Hugiet E., Strategiczny kontekst zarządzania wiedzą, Wydawnictwo Akademii Ekonomicznej im. O. Langego we Wrocławiu, Wrocław 2007 s. 137-139.
- 17. Wacker J. G., A theory of formal conceptual definitions: developing theory-building measurement instruments, "Journal of Operations Management" 2004, nr 22, s. 629-650.
- 18. Więsław S., *Sytuacja i status zawodowy dyrektorów szkół i placówek oświatowych*, Ośrodek Rozwoju Edukacji, Warszawa 2011, www.ore. edu.pl z dnia 25.02.2011.
- 19. Zahra S. A., George G., *Absorptive Capacity: A Review, Reconceptualization, and Extension*, "Academy of Management Review" 2002, nr 27, s. 185-203.

Bianka Godlewska-Dzioboń*

UNEMPLOYMENT AMONG UNIVERSITY GRADUATES AND THE STRUCTURE OF EDUCATION IN POLAND AT THE TERTIARY LEVEL

Abstract

The purpose of this article is to bring into light the changes in the patterns of unemployment among university graduates in the Malopolska region over the period 2007-2011 against a background of changes in the structure of education in Poland. To perform a comparative analysis of changes in the pattern of unemployment among graduates, the Malopolska region was selected because, according to GUS data, this region is one of the largest academic centers in Poland. This article will at a later time present the main issues relating to tertiary education in light of challenges posed by the Polish labor market. Subsequently the method of analysis will also be discussed as will the dynamics and structure of higher education at levels currently existing in Poland. Following that will be an assessment of changes in the patterns of unemployment among university graduates in the region. The last part of the article presents the main conclusions formulated on the basis of theoretical and empirical analyzes outlined throughout this article.

Key words: tertiary education, fields of study, unemployment, graduates, graduate studies, market needs, Poland.

1. Introduction

Over the last few months, a debate has been raging over the quality of tertiary education in Poland. It is somewhat surprising, taking into account that this topic has been seen as a particularly important point of interest in Poland's transformation as well as an important element to improving its human capital. It is also worth pointing out that the development of tertiary education in Poland has been a kind of insurance policy for growing unemployment in the new economic realities of Poland. From the beginning, a belief has dominated that tertiary education is a safety measure against

^{*} MA, PH.D student of Cracow University of Economics.

professional inactivity and, in fact, may even provide the opportunity to land a good job and thus a relatively higher income and overall intellectual development.

Many skeptics already predicted earlier that a "crisis" in Polish tertiary education is inevitable due to several key factors: an increase in the number of people with degrees, the dissemination of tertiary education – it's no longer simply a privilege reserved for the elite, the deteriorating situation in the Polish labor market and a decreasing ability of the workforce to absorb university graduates, more liberal requirements for admission into many fields of study, and low public funding of higher education.

These factors have meant that now, more twenty years since the introduction of a market economy in Poland, the quality of education at the tertiary level has significantly diminished. In addition, graduates find themselves choosing employment subject to the requirements of the labor market, while the private sector refuses to take up the challenge of building schools of higher learning with curriculums based on the quality of education. Alternatively a widely proposed liberalization of requirements for admission to studies, a broadening in the choice of part-time studies, as well as reduced demands on students by universities has meant that graduates no longer possess qualifications generally demanded by employers. Attempts to translate to the general public that the market will solve all its own problems have been misguided, and today's results are a major concern for policymakers in the current model of tertiary education in Poland.

The purpose of this article is to bring into light the changes in the patterns of unemployment among university graduates in the Malopolska region over the period 2007-2011 against a background of changes in the structure of education in Poland. To perform a comparative analysis of changes in the pattern of unemployment among graduates, the Malopolska region was selected because, according to GUS data, this region is one of the largest academic centers in Poland.

Taking this into account, this article will at a later time present the main issues relating to tertiary education in light of challenges posed by the Polish labor market. Subsequently the method of analysis will also be discussed as will the dynamics and structure of higher education at levels currently existing in Poland. Following that will be an assessment of changes in the patterns of unemployment among university graduates in the region. The last part of the article presents the main conclusions formulated on the basis of theoretical and empirical analyzes outlined throughout this article.

Education at the tertiary level and the challenges of the Polish labor market - a theoretical discourse

Educational policy is today considered one of the most important elements of economic policy in Poland [Musialik 2009, s. 451]. This allows for the realization of many economic goals, in particular the efficient allocation of resources, social justice and the leveling of social inequalities [Levin, Driver 1994; Dabrowa-Szefler, Jabłecka-Prysłopska 2006 i 2007]. In Poland, both in academic and political circles, there exists an awareness of the interrelationship between education and economic policy [Buchner-Jeziorska 1996]. The development of higher education is a prerequisite leading to the rapid increase in the percentage of highly qualified personnel present in the economy. There is a clear relationship between the number of graduates possessing degrees and the dynamics of economic growth [Romer 1990, 2005, s.251-286; Gyimah-Brempong i in. 2006, s. 509-529]. In addition, consideration should be given to the relationship which exists between a labor force lacking adequate qualifications and structural unemployment. It is worth mentioning also that tertiary education should be tailored to current and future needs of the economy and in particular the labor market. According to experts, the OECD, over the previous two decades in Poland has focused too heavily on the dissemination of higher education, while brushing aside many important issues for future consideration [OECD 2008]. Worth noting from among these are such issues as: maintaining a certain degree of autonomy in an institution, while upholding a rational level of diversification, as well as developing close ties with local labor markets [Diagnoza...2009, s.15].

The last issue in particular seems to have brought severe consequences for Poland, having very much begun to reveal itself over recent years when the popularity of possessing a university degree first began to spread. For this reason, experienced managers, university professors and business people began to form rather negative opinions; the general message being that Polish institutes of higher education are simply factories turning out unequipped workers in search of employment. In such a case the fundamental question arises. Is education at the tertiary level in such a bad state in relation to the challenges of the modern labor market in Poland and what changes are taking place in this area?

To begin, it is worth looking at this issue from an international perspective, as the problems that have characterized the Polish system of higher education, are partly related to the diagnosed dangers faced in foreign education systems. D. Antonowicz of the Nicolaus Copernicus University in Torun, notes that the issue of a crisis in tertiary education has appeared many times previously since the beginning of the twentieth century. Generally the pauperisation of tertiary

education (O. Gasset) is an old topic, and even the U.S. education system has been the subject of criticism (Alan Bloom), while universities have been said to be in ruins (Bill Readings). Also, recently many people in the UK have spoken out negatively, claiming that millions of secondary school and college graduates are unqualified to work. According to the UK business environment they are unable to perform even the simplest of tasks, from reading and writing to making presentations or communicating. The problem of overproduction of graduates with degrees has also affected China. Chinese experts estimate that the blame for this problem can be found within the global financial crisis, but also in the multitudes possessing worthless diplomas. In the 90s only one in every twenty Chinese high school graduates continued on to study at college or university. However by the end of the previous decade thousands of new universities had opened and today every forth high school graduate continues his or her education. When China's growing economy found itself starved of engineers in the early 80s, the height of the baby boom arrived and so these needs were quickly met. Presently the economy cannot absorb the large numbers of fresh graduates entering the job market. Hence rising unemployment among the ranks of Chinese university graduates is visible.

The fact that the situation in Polish universities has also become critical has been the subject of discussion ever since the beginning of the social-political transformation following 1989. In recent months the debate over the future of Polish higher education has gained momentum and sparked a broad debate among universities, businesses and government representatives. For example, PZU President, Andrzej Klesyk, - in the "Gazeta Wyborcza" newspaper - accused Polish universities of producing a generation of unemployed. Subsequently Prof. Jan Stanek of Cracow's Jagiellonian University wrote: "... You have been deceived not only by the teachers, but by the lecturers also. They, or at least many of them, unjustifiably issued you certificates, passed you on examinations and awarded you degrees - sometimes even several. Then, in an effort to please you, the politicians made you and your parents believe, that having a degree was the equivalent of possessing appropriate knowledge and skills". Professor Ewa Nawrocka of the University of Gdansk also addressed this issue fairly critically. She pointed out that the fault lies with the university, faculty, and the students themselves. In her view, there has been a decline in ethics among academics, an overpowering tendency toward conformism, and the pursuit for the acquisition of wealth. Students appear to be arrogant, not interested in studies, intellectually lazy and passive. All these and many other opinions sought to discredit higher education in Poland.

In light of these negative views many voices were heard in defense of the current state, alleging such pessimistic assessments were unreliable and claiming that all these extreme and adverse consequences have been offset by

those favorable to the situation in the Polish economy. However, it seems that the truth is somewhere in between. It must be remembered that according to basic economic laws, the emergence of an increasing number of private universities offering the same courses as at other universities, often with different profiles, will result in a diminishing in value of any degree obtained as it becomes virtually available to any person undertaking studies. Furthermore, possession of such a diploma is no longer a rarity nor a sign of elitism. Additionally puzzling in all this is the fact that in large part certain "independents" from an academic sense have begun to speak out; that is, people who are of retirement age with professorial titles. Apparently there is a lack of self-assessment from the likes of rectors, vice-rectors, deans and clinical directors, institutes and other departments constituting much of the academic environment, and who clearly do not share these negative views at all. It can be assumed that most people working at the higher education level are stuck in the current system and do not want to speak out in case they might be misunderstood by the academic community. On top of this, academic staff's salaries are often made mention of, although no one pays attention to the fact that wages are more often in the lower range rather than in the higher. According to the Ernst & Young Report the major barrier to the proper development of academics in Poland is the pay system based on the low-end wage scale, and whose rate for younger staff members fails to guarantee an acceptable standard of living [Diagnoza..., s.7]. Another obstacle is that the teaching staff is paid according to the number of diplomas awarded, and not the quality of knowledge taught or the number of research projects completed. One example of an effort to improve a similar situation was an attempt to eliminate corruption and other pathologies among court judges by increasing their wages, so that they would be motivated and guided strictly by ethics to perform their duties in accordance with the law. Also the level of funding for tertiary education and academic research clearly deviates unfavorably from funding models in other countries, which have a better standard and higher efficiency rate in their educational systems.

We must also remember that in any organization and community there will always be extreme cases that may obscure the very real picture. One cannot help but say that the dynamically changing world also drives higher education to alter and adapt to a changing society and economy, economic liberalization, and to adapt to advancements in modern information and communication technologies. Tertiary education should no longer be a "temple of the theory," but more a center of knowledge creation sensitive to the needs of the economy. Therefore, it is necessary to change the role of both teacher and students. Today's world is no place for intellectual and casual deliberation at universities. Students must afford the desire to acquire the knowledge and skills that will enable them to find fulfilling employment in the future.

From among all the accusations, most puzzling is the fact that Polish universities do not prepare students for the challenges ahead that they will have to face with future employers. It is therefore worth conducting a multilateral discussion on this subject with the aim of developing models to improve this aspect of tertiary education. One has to accept the fact that in today's economy the determining factors to a large extent, when it comes to the attractiveness of graduates in the labor market, are their so-called social competence and moral standards, such as the ability to work independently and cope with stress or conflict, the willingness to continue the learning process, flexibility in thinking, the ability to communicate, self-presentation and assertiveness. Institutes of higher education still contribute minimally in the development of critically vital skills for independent thinking, teamwork, decision making or filing of information, not to mention practical and social skills. There is still too larger a gap between higher learning and the wider scope of the business world. The chances of graduates landing decent jobs would increase substantially as a result of closer collaboration between schools and businesses. In practice, this requires the involvement of industry representatives in the classroom and under their direction the formulation of topics for writing their thesis. Furthermore it requires the development of co-op work programs or internships, and even the implementation of joint research projects. The key element in all this seems to be establishing a model for checking the quality of education with regard to incorporated practical elements as well as a more stringent approach in granting degrees that will ultimately be the culmination of studies even in the absence of practical skills.

The opinion that not everyone is suited for college or university is also one that cannot be dismissed. Such an approach would lead to the selection of the most appropriate candidates in any given field of study. On the one hand this process would be characterized by students possessing the ability for a rapid assimilation of theoretical and practical knowledge, and thus would be more easily absorbed into the market. An example of this occurs in medical studies, where the selection process is the important initial phase in a student's education. Alumni generally do not face any obstacles in finding job placements, and often do their internships at universities, where graduates in other fields of study - often recruited beyond the realm of any inhibiting selection process - have difficulty finding employment. Quite often mention is made of elite studies at Harvard and Oxford Universities. However one must remember that authorities at these universities place the utmost priority on obtaining students achieving the highest grades in their secondary education.

It is certainly no secret that the market economy of higher education - especially that at a relatively low level - has become a very profitable venture. Unfortunately, this line of thought favors the recent reforms of the so-called

"Matura" final examinations, which have neither increased the number of outstanding candidates for further studies, nor have they proved an effective criterion for selecting the best candidates. Certainly universities with more demanding requirements would function better if they found themselves in a small and elite community. Yet such a way of thinking in the modern era of mass education is not acceptable in the current marketplace.

In light of evidence that education in Poland varies considerably, it would be worth pondering the idea of introducing central theoretical and practical final examinations. These would become the ultimate rung in the selection and verification process for ensuring that a graduate in any particular field possesses the theoretical knowledge, practical skills and moral attitudes anticipated by his program of study. Along this line of thinking we should not overlook the vital role that industry representatives must play in taking responsibility for the stringent examination of students and their mastery of practical skills in their particular field of study, enabling only those persons who have properly mastered the practical program of study to receive a Bachelor or Masters Degree. It is worth emphasizing that the State Accreditation Commission should take greater responsibility in this matter. The process of student evaluation should not occur on the basis of friendly relations, but should focus on eliminating those who simply go through the motions of learning. Graduates who only pretend to learn do not finished studies properly prepared for the requirements of the labor market and prospective employers.

Generally one should take notice particularly in tertiary education that after years of benefiting from an educational boom which has popularized higher education and has reduced the backlog in programs for Polish citizens in comparison with OECD countries, it is time to evaluate not only higher education, but the whole model of education in Poland. Poland has the highest percentage in Europe of youths who, after graduating from secondary school continue their education. The large scale of this phenomenon, however, means that graduates complete their education at varying potential levels, and that tertiary education is no longer a privilege reserved solely for the elite. Higher education alone is not enough to ensure success in the labor market. As suggested by the European Commission, there exists a need to create a new model of higher education, whereas universities themselves should take a more active part in the whole process than up to now, supporting changes towards better leadership, management and entrepreneurship, rather than just academic freedom and internal democracy. Universities should have autonomy, while at the same time being liable to greater accountability to stakeholders [Diagnoza..., s. 17]. However, one must keep in mind that the chances of finding work for graduates is a combination of several factors, and certainly can't be reduced solely to the model of higher education. These factors include: the level

of education, the field of study, the quality of education, the quality and way an internship is served, the state of the local labor market, an individual graduate's potential in terms of intellectual, communicative and personality traits.

2. Method of research

This article makes reference to data concerning the number of graduates between the years 2000-2011 in Poland covering 22 fields of study: Teaching, Humanities, Social Science, Arts, Journalism and Information Technology, Physics, Mathematics and Statistics, Computing, Engineering and Technology, Architecture and Construction, Economics and Administration, Human Services, Public Transport, Security, Law, Medicine, Biology, Agriculture, Forestry and Fisheries, Veterinary Medicine, Environmental Protection, Production and Processing. These fields have been divided into six groups:

- a) Group I Humanities (Teaching, Humanities, Social Services);
- b) Group II the Arts (Arts, Journalism and Information Technology);
- c) Group III Sciences (Physics, Mathematics and Statistics, Computing, Engineering and Technology, Architecture and Construction);
- d) Group IV Economics and Law (Economics and Administration, Human Services, Public Transport, Environmental Protection and Security, Law);
- e) Group V Medicine (medicine, biology);
- f) Group VI Agriculture (Agriculture, Forestry and Fisheries, Veterinary Medicine, Environmental Protection, Production and Processing).

Data used relating to numbers of graduates in these fields of study have been taken from the Statistical Logbooks of GUS.

In addition, reference has been made to information obtained from the Regional Labour Office in Cracow concerning numbers of unemployed university graduates completing various fields of study between the years 2007-2011 and currently employed.

Data concerning both enrollment numbers at higher education institutes in Poland and unemployment figures among university graduates in the Malopolska region has enabled an accurate calculation of the coefficients for respective patterns, and the structure of education in Poland according to fields of study in each year from 2000 to 2011 allowing for variations in patterns of unemployment among university graduates in their particular fields of study between the years 2007-2011. Also estimated have been the highest rate of increase in enrollment numbers in the particular fields of study and in which the figure was relatively stable. Similarly, efforts have been made to analyze the dynamics of changes in patterns of unemployment. Comparisons were made for the years 2007-2011, because data for this period were readily available for the Malopolska region.

The structure of education has been analyzed starting from the year 2000 as this allowed us to show trends in these patterns in Poland.

The decision to compare changes in unemployment trends of graduates in the Malopolska region against the background of national transformations within the various fields of study has been intentional as the Malopolska region, following Warsaw, is one of the largest academic centers in Poland. With its 23 universities enrollment figures in Malopolska reach over 200,000 - with nearly 50,000 graduating each year - giving it second place in all of Poland (after Warsaw). The time frame for analysis was selected due to the availability of statistical data used, while making possible the presentation of changes of unemployment trends among graduates in the labor market over a period, when an overall deterioration in the labor market existed as a result of the crisis in world financial markets.

3. Dynamics and structure of tertiary education in Poland

In 2009 in Poland 461 institutes of higher learning were functioning (including schools connected with the Ministry of Defense, Internal Affairs and Administration). A total of 1,266,900 students (66.7% of all students) were attending 131 public schools, including 324,000 in their first year of study. Compared with 2008 enrollment numbers at these schools decreased by 0.1%. A large part of tertiary education comes from the private sector, which has been developing since 1991. In 2009, there were 330 such schools with an enrollment of 633,100 students (or 33.3% of all students), including 163,700 in their first year of study. Compared with 2008, a 1.5% increase of non-public institutes followed, while enrollment at such schools fell by 4.0%. In 2009, a total of approximately 1.9 million people were enrolled in Poland; an increase of about 0.3 million compared with the year 2000, and a decrease of approximately 0.05 million compared to 2005. At the same time the number of graduates has been increasing systematically. In 2009 there were 0.44 million graduates; an increase of approximately 140,000 compared to the year 2000 and about 50,000 compared to the year 2005 (Table 1).

Table 1. Data concerning higher education in Poland during 2000-2009

Specifications		Dates			
Specifications	2000	2005	2009		
Number of tertiary education institutes in Poland	310	445	461		
Enrollment figures in Poland (millions)	1,58	1,95	1,90		
Number of graduates in Poland (thousand)	304	391	440		

Source: independent study based on Notatka na temat szkół wyższych w Polsce, GUS, Warsaw 2010, October 26, p.1

The proportion of highly educated people in Poland increased from approximately 10% in 1997 to about 20% in 2010. At the same time, the number of students completing tertiary education in OECD countries increased from about 20% to about 27%. As a result, the difference separating Poland from OECD countries, in terms of the percentage of people completing degrees, has declined from more than 10% to around 8%. Thus, the process of promoting higher education is not only a characteristic of Poland alone, but also applies to all highly developed countries. Despite such a significant increase in the number of graduates possessing degrees in Poland, it is still a few percentage points behind in terms of schooling compared with the average level for all OECD countries.

In recent years, schools have been plagued by a declining interest in Humanistic, Economic, Social Services and Information Technology studies, while fields such as National Defense and Security and health related studies such as Social Services as well as Architecture and Construction have become more popular. Despite this, the dominant group still remains the group consisting of Teaching, Humanities and Social Services (37.6% in 2010), followed by the group consisting of Economic, Administrative, Law and Security studies (32.3% in 2010). Much less popular are the Sciences (12.9% in 2010) (Table 2).

Table 2. The proportion of graduates from various fields of study in Polish universities divided into six groups during the period 2000-2010 (%)

Group	Fields of Study		Date	
I – Humanities	Teaching, Humanities, Social Services	2000	2005	2010
II – theArts	Arts, Journalism, Information Technology	39,2	37,4	37,6
III – Sciences	Physics, Mathematics and Statistics, Computing, Engineering, Architecture and Construction	1,3	1,7	2,4
IV – Economics and Law	Economics and Administration, Human Services, Public Transport Services, Law and Security	12,0	13,6	12,9
V – Medicine	Medicine, Biology	37,7	37,5	32,3
VI – Agriculture	Agriculture, Forestry and Fisheries, Veterinary Medicine, Environmental Protection, Production and Processing	6,1	4,0	5,6

Source: independent study based on data from Central Statistical Office in Warsaw.

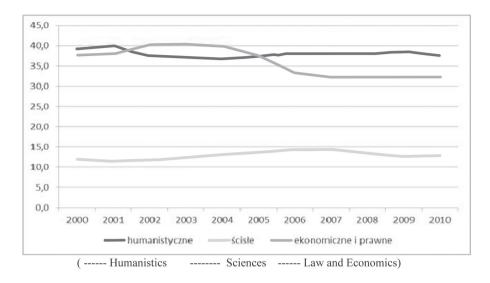


Figure 1. The proportion of university graduates divided into three groups: Humanities, Sciences, Law and Economics in Poland during 2000-2010 (%) [Source: independent study based on data from Central Statistical Office in Warsaw].

As shown in Figure 1 the proportion of graduates completing Humanistic studies now dominates, while in the period 2000-2010 this number varied between 35-40%. In turn, the number enrolled in Economic studies can be seen to peak during 2002-2004 (about 40%), followed by a marked reduction in the number of graduates by a few percentage points (Figure 1). A decline in the proportion of graduates in Economics from 40% (2004) to around 32% (2010) may be a response to increasing difficulties in finding jobs for graduates in these fields. Striking, however, is the continuing large proportion of graduates in Teaching, Humanities and Social Services despite obvious difficulties in the labor market. This trend is undoubtedly due to the relatively ease of courses implemented into these programs of study which, however more descriptive, are less formal in nature.

4. The pattern of unemployment among university graduates - an example: the Malopolska region

Utilizing data related to unemployment figures registered by the Regional Labour Office in Cracow, Tables 3-5 provide a summary of comparative information on unemployment figures among university graduates and their pattern according to fields of study during 2007-2011.

Table 3. Unemployment figures among university graduates in the Malopolska region during the period 2007-2011

Groups fields	Fields of Study			Date		
of Study		2007	2008	2009	2010	2011
GROUP I	Teaching, Humanities, Social Services	2477	2577	3472	4273	4625
GROUP II	Arts, Journalism, Information Technology	211	198	233	346	331
GROUP III	Physics, Mathematics and Statistics, Computing, Engineering Architecture and Construction	1153	1172	1900	3235	1995
GROUP IV	Economics and Administration, Human Services, Public Transport Services, Law and Security	3239	3457	4753	4393	5780
GROUP V	Medicine, Biology	900	922	1116	1275	1330
GROUP VI	Agriculture, Forestry and Fisheries, Veterinary Medicine, Environmental Protection, Production and Process http://www.jallc.nato.int/activities/jpa.asp (date of access: 09 June 2012). izng	837	889	1162	1261	1198
	TOTALS	8817	9215	12636	14783	15259

Source: independent study based on data from the Regional Labour Office in Cracow.

Table 3 shows unemployment figure among university graduates in the Malopolska region during the years 2007-2011. These data suggest that during 2007-2011 the total figure in the Malopolska region increased from nearly 9000 to over 15,000. This represents an increase of more than 70% over four years (Table 4). Thus, this result should be regarded as a negative phenomenon and disturbing at the same time, even taking into account that the Malopolska region is the second largest academic center in Poland.

Under more scrupulous consideration it becomes evident that most of the unemployed officially registered have completed their education in fields in group IV; a group which includes Economics and Law. During the years 2007-2011, unemployment figures increased from about 3,200 to nearly 5,800, or in other words by nearly 80%. These data indicate that in the Malopolska region up to the present there has been a surplus of students enrolled in these particular fields of study. In terms of unemployment numbers among university graduates, those having completed degrees in the fields of Teaching, Humanities and Social Services make up second highest. Over the period 2007-2011 there was an increase of nearly 2,500 to more than 4,500 giving a growth rate during this period of nearly 90%. It may be said that currently fields of study in this group are characterized by a low absorption rate into the labor market even though there is a clear surplus of jobs available in this field. These data, therefore, suggest that the growth rate of unemployment in the field of Humanities is even higher than in the area of Economics and Law.

Table 4. Dynamics of changes in unemployment trends among university graduates in the Malopolska region during 2007-2011 (%)

Groups fields of Study	Fields of Study	Changes during 2007-2011
GROUP I	Teaching, Humanities, Social Services	86,7
GROUP II	Arts, Journalism, Information Technology	56,9
GROUP III	Physics, Mathematics and Statistics, Computing, Engineering, Architecture and Construction	73,0
GROUP IV	Economics and Administration, Human Services, Public Transport Services, Law and Security	78,5
GROUP V	Medicine, Biology	47,8
GROUP VI	Agriculture, Forestry and Fisheries, Veterinary Medicine Environmental Protection, Production and Processing,	43,1
	TOTALS	73,1

Source: independent study based on data from the Regional Labour Office in Cracow.

Table 5. The pattern of unemployment in various fields of study in the Malopolska region during the period 2007-2011

Groups fields of	Fields of Study	Date			Date			
Study		2007	2008	2009	2010	2011		
GROUP I	Teaching, Humanities, Social Services	28,1	28,0	27,5	28,9	30,3		

Groups fields of	Fields of Study	Date				
Study		2007	2008	2009	2010	2011
GROUP II	Arts, Journalism, Information Technology	2,4	2,1	1,8	2,3	2,2
GROUP III	Physics, Mathematics and Statistics, Computing, Engineering, Architecture and Construction	13,1	12,7	15,	21,9	13,1
GROUP IV	Economics and Administration, Human Services, Public Transport Services, Law and Security	36,7	37,5	37,6	29,7	37,9
GROUP V	Medicine, Biology	10,2	10,0	8,8	8,6	8,7
GROUP VI	Agriculture, Forestry and Fisheries, Veterinary Medicine, Environmental Protection, Production and Processing	9,5	9,6	9,2	8,5	7,9

Source: independent study based on data from the Regional Labour Office in Cracow.

Relatively speaking the most stable unemployment figures belonged to group VI (Agriculture) and group V (Medicine), which amounted to 1198 and 1330 individuals in 2011 respectively (Table 3). The increase in unemployment in terms of percentage in these groups during the years 2007 - 2011 was 43% and 48% respectively (Table 4).

Looking in turn at the pattern of unemployment among graduates, the larger portion consists of those completing Economic or Law studies (almost 38% in 2011) as well as those with degrees in Teaching, Humanities and Social Services (over 30% in 2011). In the case of graduates from both these groups together, there is a disturbing trend towards the greater portion of unemployed graduates within the total pattern coming from just these groups. On the other hand, in the period 2007-2011 a decreasing portion of unemployed graduates came from the groups consisting of Agriculture and Medicine. This decline amounted to anywhere from 9.5% to 7.9% and from 10.2% to 8.7% (Table 5).

Conclusions

A theoretical and empirical analysis brings our attention to several key issues.

 Improving education at the level of graduate studies is certainly a process requiring several years and demands systematic change. The main aim of these changes should be to reduce the mismatch of curriculums to the needs of the economy. In this case, this means to bringing the business world and higher education closer together, thus producing a system of tertiary education tailor made to satisfy labor market requirements.

- 2. Monitoring market needs and enrollment numbers is a key element, as well as placing a greater emphasis on the selection process of candidates. In this regard, it seems advisable to implement measures for reducing enrollment in particular fields, including in those where there is an overproduction of graduates causing an increase in unemployment figures. This can be done, for example, by partially cutting excess funding certain courses both in public and private sectors.
- 3. After several years of relative calmness in higher education, the labor market has not met expectations and is unable to force universities into improving the quality and adapting their curriculums. In a certain sense, it seems that policy changes at the ministerial level would more likely bring about changes in the structure of higher education, and, thus, one more tailored to the needs of the labor market.
- 4. It seems necessary to refine the implementation of mandatory practical activities, which would be included in students' courses of study, particularly in their final year, and should be more rigorously tested primarily by teachers and employer representatives.
- 5. The probability of securing employment by graduates is a result of several factors, (it not only depends on higher education alone), which include: the level of education, field of study, the quality of education, the quality and method applied during an internship, the state the local labor market, intellectual potential, communicative skills and other personality traits of individual graduates.
- 6. The pattern of unemployment in the Malopolska region indicates there is a surplus of university graduates in the fields of Teaching, Humanities, Social Services and Economics and that figure is growing at an alarming rate. In 2011 they accounted for more than two thirds of the estimated 15 000 university graduates registered who remained unemployed. It seems that the situation in Malopolska is a response by regional labor markets to the situation which has developed in all fields of education in Poland. Graduates of these courses through the years 2000-2010 accounted for more than 70% of graduates from all fields concerned. It seems that growing unemployment in this group is an inevitable result of an overproduction of graduates. Yet, on the other hand, one can notice that student are beginning to react by less frequently enrolling in these courses of study, even though they still remain dominant. The fact remains that a decline occurred in the proportion of university students graduating from Economics in Poland during 2000-2010 from about 5-8% to around 32%. At the same time it is still very puzzling how the number of graduates in Humanities in Poland remains at a relatively high level of about 38 % of all graduates.

References

- 1. Buchner-Jeziorska A., *System edukacji a potencjał modernizacyjny społeczeńtwa*, "Nauka i szkolnictwo wyższe", 1996, nr 7.
- 2. Dane dotyczące liczby bezrobotnych wśród osób z wyższym wykształceniem w Małopolsce w latach 2007–2011, Wojewódzki Urząd Pracy w Krakowie, Kraków 2012.
- 3. Dąbrowa-Szefler M., Jabłecka J., *Szkolnictwo wyższe w Polsce*, MNiSW, Warszawa 2007.
- 4. *Diagnoza stanu szkolnictwa wyższego w Polsce*, Raport Ernst & Young Business Advisory i Instytut Badań nad Gospodarką Rynkową, Warszawa 2009, Listopad.
- 5. Gyimah-Brempong K., Paddison O., Mitiku W., *Higher Education and Economic Growth in Africa*, "Journal of Development Studies" 2006, Vol. 42, No. 3, s. 509–529.
- 6. Kozak K., UK: Absolwenci szkół nic nie umieją, MojaWyspa.co.uk, 2012.
- 7. Kruczkowska M., W Chinach miliony absolwentów wyższych uczelni są bez pracy, 2009.
- 8. Levin H.M., Driver C.E., 1994, Estimating the Costs of an Educational Voucher System [in:] Selected Papers in School Finance, Stanford University, 1994.
- 9. Mazur W., *Rząd zaniedbał szkolnictwo niższe i wyższe*, "Nasza Polska" 2012, Nr 18 (861), 2 maja.
- 10. Musialik R., *Instytucje polskiego szkolnictwa wyższego*, Uniwersytet Rzeszowski, Zeszyt nr 14, Rzeszów 2009.
- 11. OECD, Education at a Glance, OECD 2008.
- 12. OECD, Higher Education to 2030, OECD 2008.
- 13. OECD, Tertiary Education Reviews: Poland, OECD 2007.
- 14. Rocznik Statystyczny za lata 2002–2011. Dane dotyczące absolwentów szkół wyższych w Polsce w latach 2000 2010 według kierunków kształcenia, Główny Urząd Statystyczny w Warszawie, Warszawa 2002–2011.
- 15. Romer P., Human capital and growth: theory and evidence, "Carnegie-Rochester Conference Series on Public Policy" 1990, Vol. 32, 251–286.
- 16. Sendrowicz B., Piątkowska M., *Studenci dla "Gazety": o nauce praktycznych umiejętności na uczelniach nie ma mowy*, "Gazeta" 2012, 23 kwietnia.
- 17. The Role of Higher Education in Economic Development, Northern Illinois University, 2005, May.
- 18. Zadroga A., *Dobra uczelnia = dobra praca*, "Gazeta Wyborcza" 2011, 17 października.

Katarzyna Kolud*

RESIDENTIAL REAL ESTATE MANAGEMENT WITH THE USE OF OUTSOURCING - CASE STUDY: A SELECTED WORKPLACE

Abstract

This article concerns the process of real estate management, including residential ones, to which a selected workplace was analysed in cooperation with external suppliers and contractors in the implementation of outsourcing in real estate management procedures in accordance with the workplace's methods of work. The determined scope of outsourcing has operational, organizational and economic outcomes.

Key words: outsourcing in residential property management; areas, functions and tasks in residential property management, outsourcing methodology in selected workplace

1. Introduction

Real estate management can be held in accordance with three models of management: direct, indirect and work order (outsourcing). Administrators and property owners can choose between those alternatives and decide if they want to conduct a management process on their own or with suppliers or external contractors. Real estate management is a very complex activity and in order to ensure proper functioning of real estate, it is necessary to have an interdisciplinary knowledge and ability as to its practical application.

The aim of this article is to approach the problems of real estate management, with detailed consideration to residential properties. This article also includes an examination of using outsourcing in real estate management by the selected workplace.

^{*} Mgr, Katarzyna Kolud, Wykładowca, Beskidzkie Towarzystwo Edukacyjne, Bielsko-Biała.

2. The essence of property management

Management is concentrated on four functions: planning and decision making, organizing, leadership and monitoring (Griffin, 2000). These functions were also used in the organization of property management processes shaping its nature. In Art. 185 Act of 21 August 1997 on real estate management we can find that property management involves making decisions and making activities aimed at ensuring proper economical and financial management, ensuring the proper energy management, the current administration of the estate, property maintenance without deterioration for its intended purpose and justified investing in real estate. There are two easily noticeable approaches that ascribe different significance to the above-mentioned functions: narrower - classic / static and wider - modern / dynamic (Śliwiński, 2000, p. 21-22). As far as the narrower approach to management is concerned, tasks performed in property management are acts connected to administration being restricted to carrying out ordinary affairs arising from property usage (Zarządzanie nieruchomościami, 2000, p. 27) called operational management (Encyklopedia wiedzy o nieruchomościach, 2008, p. 374). An approach similar to this can be found in art. 185, item 2, Act on real estate management, stating that current administration is one of many tasks that go into the making of property management. This act gives weight to taking reasonable action to invest in properties – however, clientuser type politics are bypassed. The narrower approach ascribes the four functions mentioned before a marginal meaning. In the case of properties from which the administrator or owner expects to gain a profit, the narrower approach seems to be insufficient (Nalepka, 2006, s. 27). Currently, among property administrators, the most popular is a wider approach which points to the necessity for planning and strategic management, searching for solutions to their optimization, organizing and commanding, while stressing at the same time the importance of supervising processes. It also presupposes the need for innovation and creativity in property management and concentration on their occupants needs. This is particularly noticeable in the growing popularity of facility management. Included in the core facilities, three areas of real estate management with their growing importance are: technique, area and financial management. In reference to Śliwiński and Śliwiński, these facilities are initiating activities not only in the domain of maintaining, supplying and real estate utilisation but also in the domain of investments. Facilities management is the synonym for the modern owners', users' and clients' approach or real estate clients' and also the powerful and their expectations (Śliwiński, Śliwiński, 2006, p. 122, 18-19). As far as literature is concerned, fulfilment of expectations is connected with perceiving real estate as a subject of investments. These results in that the main tasks involve taking the activities in order to generate income, reduce operating costs, increase property values and enhancing the credibility and prestige of the real estate (Henclewska, 2002, s. 37). In practice, administrators and owners do not always aim to maximize the market value of managed property or its type does not predestine them to do so because the management plan for residential, office, commercial, industrial or special property looks different. Indication of the main areas of facilities and management process with emphasis on all or just those which are appropriate to the type of property – seems to be a natural transition from a narrower to a broader approach, especially that the broader one is not an effect of sudden and revolutionary change, but rather a consequence of the slow suppression of the narrower approach.

3. The essence of residential property management

The differences in the process of real estate management are the effects of goals which were set up and in consequence also the effect of functions whose aims should be met. Such functions, in the case of residential estate management, are to meet residential demands. The areas of residential estate management are identical with those typical for different properties because very exact demarcation between them is impossible as real estate management is nevertheless part of the discipline "real estate management". As noted earlier, real estate management consists of the areas concerned with techniques, fields and financial management. These areas were named appropriately as to the needs of the management process: management of technical maintenance, area utilization management and financial management which remains unchanged. Seemly essential to include with these areas are not only the domains as Śliwinski and Śliwinski suggest, but also their functions. Three areas of residential estate management should consist of nine types of functions in accordance to Table 1 In the first area and connected with management of technical maintenance, the greatest number of functions may be related to tasks connected with renovation, preservation, modernization and investment/capital expenditures and is related directly to the age of the real estate. The possibility of applying these functions correctly is the direct effect of taking basic steps in organizational planning, law and administration and social steps as well. For this reason including them here is a must. Not assigning them to this classification would have immediate and visible consequences not only in terms of security but also in terms of comfort level. The technical aspect of maintaining real estate should be treated as an activity aimed at ensuring a sense of security to clients but also at maximizing their level of satisfaction from using the real estate. In technical maintenance the attitude of the administrator, the owner and all inhabitants actively participating in the process of property management affects the whole process as each party has their own contribution to make. In terms of area management, one group of functions of an organizational and supervisory nature have been indicated. These functions consist of four groups of tasks of great importance as having influence on the level of residents' satisfaction. In this case their personal involvement is not required. The responsibility for this element falls mainly with an administrator or owner. Alternatively, financial management is an area in which the tax and accounting functions are separated from economic and financial functions. The first focuses on keeping accounting and non-accounting records while the second, on the economic and financial management associated with broadly defined records of expenses and incomes, financial reporting, financial surplus or coverage of losses, depreciation charges or the creation of funds.

Residential property management requires a broader or wider range of functions in all or chosen areas. Force applied to particular areas of technical property maintenance, area utilization management and financial management is directly related to the type of property and purpose intended by administrator or owner. Some administrators manage real estate to draw income or increase the property value. However most of them manage real estate in order to fulfil responsibilities arising from relevant legislation.

Table 1 Areas, functions and tasks in residential property management

Area of management	Functions of management	Tasks
	Renovation –	M-intrinian
Technical property	conservation –	Maintaining a proper condition, especially: - carrying out renovation,
maintenance.	modernization	- troubleshooting,
mamicinance.	- investment	- carrying out repairs,
	(operational)	- carrying out of general construction works,
	(орегинопил)	- modernization of buildings and their infrastructure,
		- identifying needs for renovation and related.
		Ensuring efficient operation of systems and devices.
		Maintaining good order in terms of fire.
		Maintaining proper hygienic, sanitary and aesthetic
		condition.
		Ensuring marking and lighting.
		Ensuring protection. Caring for the property.
		Conducting technical supervision and warranty inspection.
		Coordinating and monitoring the work of technical services.
		Keeping the technical and field – legal documentation.
		Organization of tenders for works and services.
		Organization of recruitment tenders for works and services.
		Developing concepts of investment.
		Preparation of documentation to the concepts of
		investment.
		Organizing and accounting of projects. Commissioning.
		Handing over for use.
		Implementation of development processes.
		Entering into and termination of management contracts,
		with the administrators, suppliers and contractors.
		Optimization of management expenses, in particular:
		- searching providers, negotiating prices and contract
		conditions,
		- reducing costs of utilities delivering,
		- reducing costs of external services.
	Planning	Creating a management plan.
		Creating an annual and long-term economic – financial
		plan (financial – economic, social – economic).
		Creating an annual and long – term plan of renovations and
		maintenance.
		Creating a plan for economic – technological investments.
		Creating a security plan. Creating a social activity plan.
	Legal	Clarifying the legal position of ground and property.
		Completing the normative acts.
		Preparing draft contracts, actions, court applications,
		motions for initiating executive proceedings.
		Preparing draft internal regulations.

Area of	Functions of	Tasks
management	management	- 10-10
Technical property maintenance.	Legal	Controlling the formalities of draft resolutions, rules, regulations, and internal instructions. Providing information, advice, issuing legal opinions and explanations. Represent before third parties, particularly: on trial.
	Organizational - administrative	Organizing and administrative servicing of reporting meetings. Keeping correspondence and in-coming correspondence log. Receiving complaints and requests. Providing direct and telephone information for residents and other interested. Giving access to the selected documents for residents: statute, internal regulations and other. Cooperation with the residents. Giving the certificates for the resident's needs. Registration of residents. Housing stock registration. Transformation of occupancy right. Purchasing of fixed assets.
	Social	Providing information about possibilities of assistance from different sources. Helping the unemployed. Volunteering as assistance for the elderly, solitary and disabled people. Cooperating with the Employment Agency with reference to hiring interns, graduates and intervention employees. Cooperating with social Assistance Centres in the organization of community work. Organizing team-building meetings.
Area utilization management.	Organisational - supervisory	Entering into contracts for utilities delivery, including: - electricity, water, gas sewage and waste disposal, telecommunication Area management, including: - analysing, planning designing in order to optimize utilities exploitation, - organizing renting and leasing, - running property marketing activities. Caring for green areas. Coordinating and controlling the works of property operating services, including:: cooperating with cleaning services.
Financial management.	Accounting - taxation	Keeping accounting records. Keeping non-accounting records, in particular: - common property management expenses, - advances paid to cover the management expenses,

Area of management	Functions of management	Tasks
Financial management.	Accounting - taxation	- settlements due to other matters in favour of the common property. Tax information.
	Clearing - vindicatory	Calculating the assessment of charges. Informing about rates of rent and other charges. Balance reconciliation. Cost calculation (e.g. common property). Settlement for cost of utilities delivered (periodic, annual). Reconciliation of payments or forms of debt payments due to failure to pay the fee or current charges delays.
	Economic - financial	Financial planning. Keeping the economic-financial management, especially: - incomes, - expenses. Financial reporting. Making analysis, in particular: - economic-financial, - indicatory, - informative (in different sections, for residents). Managing the renovation fund. Investments accounting. Insuring the housing units. Developing strategies in order to increase economic and financial efficiency of property utilization.

Source: Own work.

4. Outsourcing in the residential property management of the selected workplace

The Forest District is the basic, independent organizational unit of the National Forest Holding "State Forests" which is operating within the framework of Regional Directorate of State Forestry in Silesia. Management is performed by its own employees and external suppliers and contractors. Methodology in the implementation of outsourcing in the Forest District has seven phases. They are depicted in Figure 1.

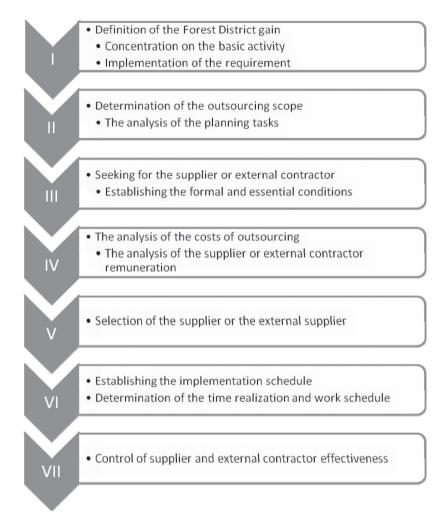


Figure 1. The methodology of the outsourcing implementation [Source: Own study conducted on the basis of data gathered from research studies in the Forest District in Bielsko-Biała during years 2007-2011].

The Forest District's goals to concentrate on basic activities (in which residential resources managing is not included) combined with the lack of human resources to complete the chosen tasks, provided the push needed in making the decision to turn to outsourcing. The Forest District cooperates with suppliers and external contractors solely in the area of technical property maintenance. In the case of renovation, preservation, modernization and investment, the motivation to use outsourcing was simply demand. A decision here is dependent on a very detailed technical

description of dwelling's condition, installation and state of appliances in need of repair. The reason for legal outsourcing is lack of a full-time lawyer being employed. The administrative and economic department is searching for suppliers and external contractors, operating mainly on the status of the Act of the 29 January 2004- Public Procurement Law which has to provide the equivalent conditions to ensure their participation. For this reason a competitive bidding process is preferred and the Forest District need to meet their obligation of providing the bidders with identical, exhaustive information essential in order that interested parties may prepare their tenders. Simultaneously the process must ensure that data provided by prospective suppliers and contractors will not be transferred to other parties or used for other purposes. The Forest District addresses the issue of their technical and economical credibility by confirming that requirements are met. An evaluation of tendered bids is done and offers are compared. The proposed conditions are the base of the evaluation: target date, transport (completeness, punctuality, conformity with order), guarantee and advertisement (guarantee period and amount of security) and also the conditions of payment (time of payment). The Forest District assesses the attached documentation diligently according to Regulation of the Prime Minister of 30 December 2009 on types of documents that may be requested by the awarding entity from the economic operator and forms in which these documents may be submitted. The result of the assessment directly correlates with the quality of the later contract realization. The next phase of applying outsourcing is a cost analysis consisting of an analysis of supplier or external contractor bid, i.e. the cost of contract realization. The Forest District is obliged to asset these documents which confirm market value and guarantee a particular contract will be finalized not at premium rate but at current market value. The Forest District is guided by the principle of contract effectiveness, which is the achievement of the best possible effect at the lowest possible cost. At this point the choice of supplier or external contractor is considered to be the choice of optimal implementation of the contract. The next phase in outsourcing is the elaboration of the work schedule. The Forest District is responsible for the schedule. Non-conformity in terms of deadlines may result in the imposition of damages and interest charges on the supplier or external contractor according to regulations in force at present Art. 636 to 647 Act of 23 April 1964 - Civil Code. The last phase of the implementation of outsourcing is the control of suppliers' and external contractors' work effectiveness. This is achieved through a quality assessment check made by a licensed employee. All external suppliers and contractors are evaluated by the same response measurement in order to provide the highest degree of quality in the performance of finalized contracts. External suppliers and contractors undergo evaluation on a one time only basis due to the short-tern nature. This is done to ensure the problems don't arise in future contracts with the same contractors, especially in the case of faults or defects in execution of a contract. For a long-term contract, external suppliers or contractors undergo an evaluation twice a year. In the case of legal outsourcing, the Forest District's evaluation criteria are: competence in performing work, flexibility, reactivity and effectiveness. An evaluation is based on the current tasks arising from the contract.

5. The scope of implementing outsourcing in residential property management of the selected workplace

Outsourcing should not always be considered as restructuring a business and shouldn't always necessarily be linked to the idea of restructuring. Research conducted in the Forest District indicates such is the case. The entity implemented tactical outsourcing characterised as follows:

- large number of short or medium-term outsourcing contracts,
- outsourcing contract concluded for the implementation of a specific task (ending with a specific effect),
- frequent use in emergency (immediate outsourcing),
- frequent lack of long-lasting relationship with external suppliers and contractors,
- external suppliers and contractors play only the role of the executor (do not build value, they are not the initiators of change),

Prerequisites for the implementation of tactical outsourcing in Forest District were:

- specific business activity of managing the residential resources, focusing on the implementation of time-changing needs and requirements of the residents,
- the inability in predicting needs for carrying out the functions and tasks in the technical areas of property maintenance, area management or financial management,
- large number of functions and tasks in the technical areas of property maintenance, area management or financial management,
- the inability to enter into long-term contracts, imposed by the Act on Public Procurement Law.

As mentioned before, the scope of outsourcing in Forest District housing stock includes technical property maintenance and realization of functions connected with exploitation and legal representation. Table 2 demonstrates the scope of outsourcing.

Table 2 Outsourcing scope in Forest District residential property management

Area	Functions	Tasks	Contract evaluation
Technical property maintenance.	Renovation Conservation Modernization	Roof reparation, including: - performance of roof construction, - roof replacement.	No faults.
	Investment	Renovation of the building, including: - painting, construction and installation works, - electrical installation.	No faults.
		Renovation works, including: - plumbing repair.	No faults.
		Renovation works, including: - floor repair, - stairs repair.	No faults.
	Legal	Legal services for occupants of housing stock, including sound legal opinion related to: - individual and intricate cases in terms of law, - entering into long-term contracts, arrangements, liabilities of greater value, - refusal to acknowledge claim, - proceeding before an adjudicating body in civil cases, - settling out-of-court in cases of inheritance, - amortisation of a loan, - promulgation of general legal act by the Forester, - others.	Positive.

Source: Own study conducted on the basis of data gathered from research studies in the Forest District in Bielsko-Biala during years 2007-2011.

Outsourcing contracts apply to renovation, construction, modernization and legal representation works' realization. A distinctive feature of outsourcing is the complex records required concerning responsibilities. In terms of a work contract, the responsibility for concluding the contract rests on the external supplier or contractor who is obliged to implement and maintain the protection of construction site, construction works and ensuring the general safety, at their own expense. They are also obliged to comply with technological requirements, carrying out work in accordance with the tendered contract and also within occupational safety and health standards. The Forest District delegates a representative and an employee, who is a construction specialist, to supervise the construction work. If a supplier or contractor fails in its work commencements within fourteen days from the date of when the work was to commencement, abandons contract realization after receiving two warnings in written form, or does not carry out work or does not provide services as

specified in the contract, the Forest District has the right to withdraw from an agreement. In the case of legal outsourcing, a legal counsel's responsibility to the Forest District is connected primarily with disciplinary responsibilities for faults, failure in legal counsel work, acts not in accordance with Ethnical Principles of Legal Advice and the inability to maintain the order and discipline.

6. The consequences of implementing outsourcing in residential resources of the selected workplace

In the Forest District operational, organizational and economic outsourcing consequences were observed.

Operational consequences are reflected in the operational management of residential resources. The Forest District decided not to employ a licensed real estate administrator. This move would result in hindering expenses optimization connected with resource maintenance while at the same time making it difficult to maintain level in various domains - property management, tax law, building regulations, civil code. It is necessary to add that real estate management which is incorporated in resources belonging to the State Treasury and is not handed over in permanent administration or usage, might be entrusted only to licensed administrators or entrepreneurs who employ such administrators. The Forestry Act of 28 September 1991 entitles also the Forest District, inter alia, to the administrative service to which the State Treasury wealth management also belongs. Hence, Forest Service employees and also white-collar workers who are not licensed administrators (within the meaning of Real Estate Management Act), through the realization of administrative tasks, can manage a property mandated to State Forests (art. 35, act. 2a The Forest Act). According to the Forest District the responsibility for residential resources rests on the Secretary who is in charge of the Administration Maintenance Section / Administrative Section. The scope of outsourcing in the Forest District is narrow what significantly impedes obtaining the reliable outsourcing results evaluation as a method of residential resource management improvement. Nonetheless, it should be pointed out that from the Forest District's point of view, the sphere connected with apartments and residential dwellings managing is very demanding and involving. The reason for this is the necessity of taking very intricate strategic decisions and connected with them tactical and operational ones the more difficult so because they have no direct impact on vision, mission and Forest District Value. The Forest District created an annual and long – term plans of renovations and maintenance, including work to be performed by their own employees:

- reliable evaluation of existing residential resources conditions,
- economic profitability of renovation and conservation works,

- Forest District financial capacity,
- prioritizing works into an urgency hierarchy.

The operational consequences of outsourcing were as follows:

- ensure the standard of quality of works carried out at a level corresponding to Forest District financial capacity and the expectations of the residents of residential resources,
- reduce the operational difficulties, associated with organizing and carrying out renovations, conservations or repairs. The Forest District draws attention to the need of taking into consideration the functionality improvement, thermal insulating power, including protection against damp and mouldy buildings as well as complications created by missing fixtures and fittings from external suppliers and contractors. Operational difficulties reduction is also the result of a functioning urgency hierarchy of the beginning of renovations and others. The Forest District, by providing an implementation timetable developed on the basis of the hierarchy mentioned before to the external supplier or contractor, for at least a specified time can focus on achieving other objectives than those associated with residential resources management,
- accurate definition of needs, which allows to not to exceed the bounds of profitability of investments and renovations carried out by the Forest District,
- satisfying quality of operational functions, reached by access to external resources. As mentioned before, the Forest District, opting for outsourcing did not have its own, competent in-building technical staff. For this reason the unit is not able to estimate the difference in quality level, between the effect of task realization of full-time employees and external entity. Therefore, it cannot unequivocally determine that the level of realization of the operational functions is higher.

Operational difficulties arising from a change of external supplier or contractor during the course of work and resulting in the necessity to find a new contractor, should be considered as a negative consequence. The Forest District, however, protects itself by including proper contractual provisions stipulating penalties and damages for the supplier or contractor in the case of disruption of contract.

Through the decision to entrust a selected range of activities into realization by external suppliers and contractors, the Forest District did not make any reductions in existing regular posts, assuming that all tasks in selected areas of residential resource management will be delegated to external realization. Organizational consequences in the Forest District were identified with observed improvement of residential resources management, which has been achieved through the realization of chosen

functions and tasks associated with them by specialized external entities outside of the organizational structure. These result mainly in the accuracy of actions taken in the scope of property exploitation, assured by compliance with contract requirements, standards, and specifications as well as current technical knowledge in the field of architecture. Thus the results of wrong decisions affecting both the Forest District and the tenants have been minimized. Dependency on external suppliers contractors is not a threat for the Forest District. In establishing cooperation with external entities and in the public funds involvement – based on Public Procurement Law - the policy of services purchasing operates on the basis of tenders submitted by different, competing external suppliers or contractors. Thus there is no possibility of preferential treatment for one particular company or person, product or service, unless he has presented the most attractive bid on a tender. Organizational consequences could be more positive if the Forest District used outsourcing on a wider range.

Other consequences have an economic nature. The Forest District bears the expenses of outsourcing which include: the fixed cost of supplier or contractor remuneration, costs of organization, maintenance of construction works and construction sites as well as construction supervision services. Remuneration for work performed cannot be higher than that specified by the cost effectiveness protocol for repairs made by a Forest District employee. The result of this calculation is the ascertainment of repair cost effectiveness or ineffectiveness which might result in construction of a new facility. Outsourcing connected with building works has had temporary financial implications, increasing Forest District financial expenses, especially in the case of investment type works. Investments connected with administrative and economic activity (including residential resource management) are solely undertaken when they are indispensable for realizing the project or to which State Forests and their departments are obliged (on the basis of the Forest Act, fire preventions regulations etc.) and which might be realized in a free/voluntary way (these which do not have to be but might be realized). In the case of obligatory investments, the economic calculation allowance relates to the expenses connected with external actors, financial options for selected tasks realization. The costs of future exploitation and investment maintenance are also included. For the non-obligatory investments, the economic calculation in the first instance allows cost criteria, next the future exploitation costs, cost of maintenance and optional the cost connected with investment abandonment and the cost of alternative investment undertaking.

7. Conclusions

Real estate management, including residential ones, is a very intricate process which demands interdisciplinary knowledge. Owners or administrators not always are qualified and competent for efficient property management.

The Forest District does not concentrate its efforts on residential resources management. - This entails a very small percentage of tasks of little significance in the whole structure. A linear organizational structure and the majority of its characteristic features has a simple structure and high level of awareness of responsibilities. But it has also a basic drawback - a quite conservative approach to management. For the Forest District amounts to taking action on a "need to" basis, not connected with the basic aim for which it has been created, but for which the current system of managing is successfully realized. However, despite the fact the Forest District endeavors to ensure the proper course of real estate management, whereas the elaborated implementation of outsourcing proves this, fulfilling the duty of choosing the best external supplier or contractor offer, in accordance with accepted principles, the Forest District is achieving a satisfactory level of quality. This is confirmed by the lack of tenant complains about the quality of work performed by suppliers or contractors and at the same time the individual is fulfilling its all possible duties resulting from the necessity of ensuring safety to the housing residence occupants.

References

- Encyklopedia wiedzy i nieruchomościach, Europejski Instytut Nieruchomości oraz Krakowski Instytut Nieruchomości, Warszawa – Kraków 2008
- 2. Griffin R.W.: *Podstawy zarządzania organizacjami*, Wydawnictwo Naukowe PWN, Warszawa 2000
- 3. Nalepka A.: Zarządzanie nieruchomościami. Wybrane zagadnienia, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków 2006
- Rozporządzenie Prezesa Rady Ministrów z dnia 30 grudnia 2009 roku w sprawie rodzajów dokumentów, jakich może żądać zamawiający od wykonawcy oraz form, w jakich te dokumenty mogą być składane (Dz. U. 2009 nr 226 poz. 1817)
- 5. Śliwiński A.: Zarządzanie nieruchomościami. Podstawy wiedzy i praktyki gospodarowania nieruchomościami, Agencja Wydawnicza Placet, Warszawa 2000
- 6. Ustawa z dnia 21 sierpnia 1997 roku o gospodarce nieruchomościami (Dz. U. 1997 nr 115 poz. 741, z późn. zm., ostatnia zmiana dokonana ustawą z 28 lipca 2011r., opublikowana w Dz. U. 2011 nr 187 poz. 1110)

- 7. *Ustawa z dnia 23 kwietnia 1964 roku Kodeks cywilny* (Dz. U. 1964 nr 16 poz. 16 z późn. zm., ostatnia zmiana dokonana ustawą z dnia 11 marca 2011r., opublikowaną w Dz. U. 2011 nr 85 poz. 458)
- 8. *Ustawa z dnia 28 września 1991 roku o lasach* (Dz. U.1991 nr 101 poz. 444, z późn. zm., ostatnia zmiana dokonana ustawą z dnia 17 grudnia 2010r., opublikowana w Dz. U. 2011 nr 34 poz. 170)
- 9. *Ustawa z dnia 29 stycznia 2004 roku Prawo zamówień publicznych* (Dz. U. 2004 nr 19 poz. 177 z późn. zm., ostatnia zmiana dokonana ustawą z dnia 25 lutego 2011 r., opublikowana w Dz.U.2011 nr 87 poz. 484)
- 10. Zarządzanie nieruchomościami, red. E. Kucharska Stasiak, Valor, Warszawa 2000

David E. Kalisz*

TRANSFORMATIONS OF THE INTERACTIVE TV MARKET IN THE NEW MEDIA

Abstract

The subject matter of the article is — based on the analysis of both the market and the consumer — interactive television and social media operating within its area. Their significance and usefulness grow as the changes on the domestic and international television market become more and more turbulent and rampant. Numerous attempts by television related companies to implement new business models have led to the necessity to consolidate the market, creating at the same time new sub-markets operating with involvement of companies which have so far operated within the Internet industry. The subject of analysis is viewing times in individual field and the development of broadcasting-related service as well as the technical capabilities enabling integration of television with the network communities.

Interactive television creates a new market quality and at the same time destroys the notion of a viewer as a passive participant in the communication process. The combination of the television broadcasting's mass influence and the Internet's flexibility generates the ability to create new products and solutions. The presented new model of market competitiveness confirmed its effectiveness, when applying social strategies. Their implementation enables identification of additional revenue sources as well as creation of value innovations being a new source of thinking about these strategies, increasing the companies' operating effectiveness on the market and gaining a competitive advantage. Only the strategy of synergy of those three technologies (television, Internet and the social media) enables the achievement of a highly competitive market position.

Key words: interactive television, strategy, social networks, new media, innovation, competition

^{*} Ph.D. candidate, Collegium of Management and Finance, Warsaw School of Economics.

1. Internet as the new television broadcast medium

The last decade of the electronic media market^[1] [Jaskiernia 2010, p. 8] has brought us an increased number of increasingly rampant transformations resulting from technological progress. The global recession brought panic to the television market and significantly lowered investors' confidence. While economic recovery has brought a certain financial stability for traditional broadcasters, we have indeed entered the new era, where – even though television still remains the main video content consumption medium – a fragmentation of the audience becomes one of the biggest threats to outdated business models. Deep interdependence and inter-permeability of television and the Internet creates a situation where traditional broadcasters can no longer afford to ignore the fundamental basis of operation of the Internet broadcasters^[2] [Ślężak 2005, p.180] based on advanced technology [Gartner Industry Research 2009, p. 4].

Digitisation of broadcast content, an increased level of broadband Internet access, data transmission speed and effective methods of image compression are all prerequisites of interactive television. Evolution involves introduction of the television content into the Internet [Gartner Industry Research 2010]^[3], but also expansion of interactivity and introduction of VOD-type additional services^[4]. We have seen the ever broader use of the Internet as a medium for various type of services. Through its use as a two-way network, with application of advanced conversion methods, the Internet has ceased to be just a medium for propagating television but has become television's natural biggest competitor [Olko, Fatyga 2011, p. 1].

An inherent asset of digital technologies used in media are various additional services, which enrich the standard delivered content, e.g. pay-perview, VOD or time-shifted watching. Services available via the Internet are of an entirely different nature. They are enriched with detailed information about each programme, as well as with additional materials, often with the ability to download those materials, or provide access to them for a specified time only, as is often the case with VOD.

¹ electronic media - media which utilize the electronic means to distribute content

² in all variations of internet television and iTV the presentation of content takes on a character of public broadcasting or public communication and publishing; to standardize the form, this field of exploitation became known as Internet broadcasting.

³ the Gartner's predictions indicate that by the end of 2014 the number of available broadband Internet connections will reach 644 million, and the production of Internet-enabled TVs will reach the level of 70 million (excluding game consoles and set-top-box devices).

⁴ VOD - Video on Demand, see http://pl.wikipedia.org/wiki/Wideo_na_życzenie

2. Internet television and Interactive television

To properly understand the concept of interactive television a clear explanation is necessary of how it differs from Internet television^[5] [Barta, Markiewicz 2007, p. 13]. The Internet television (Internet TV) is, in its simplest form, distributed via the Internet to computers, or – when using *settop-boxes*^[6] – to television screens. For Internet television one can theoretically consider various types of aggregators, which are a certain type of a multiplex, offering the ability to broadcast (in various forms) the content prepared by a third party. Europe, North America and Japan have implemented basic standardization activities for interactive television in their area of service provisioning signal compression and content distribution mechanisms via the Internet [Lugmayr, et al. 2004, p. 11].

Interactive television (iTV) is a broadcasting variant, which allows viewers to interfere with television's functioning itself, i.e. distribute programs via a separate part of the digital television network with advanced interaction capabilities and on-demand services. The iTV system has been developed to ensure delivery of video and audio signals to the end-customer over the network infrastructure, minimizing any unauthorized access threats.

From another perspective, iTV is a contemporary, spectacular multimedia service enabling distribution of video within the network environment, offering digital transmission of data and presence of the return channel. Interactive television is a tool which combines positive features of television communication channels and the Internet, which translates into new opportunities to generate revenue [Dalmas, Molina, et al. 2001]. In order to get the viewer involved with the transmitted content, advanced broadcast methods, which combine the television and the Internet, are used. In latest years it was the Internet that became the primary source of information and the new media in the area of broadly viewed entertainment. However, before it came to that, this market experienced a strong resistance from the media sector. The Internet led to the abolition of distribution barriers, enabled provisioning of diverse content shaped by consumers' expectations, and introducing the concept of provisioning of free content, and thus weakening the traditional television sector model [Venturini 2011, p. 12].

iTV leads to a change of the traditional passive content delivery method (the push model) to a model, where viewers can decide, to a significant degree, what and when they want to view something (the pull model). The passive,

⁵ one should note however that the notion of interactive television begins to gradually supersede the term Internet television

⁶ Set-top box (STB device, STB decoder) - an electronic device connected to a TV. It enables playback of video, sound, browse Internet websites, play computer games, etc.

linear (push) communication is based on an assumption that the programme can be received only in the way it is made available; whereas active, non-linear (pull) communication enables reception of the desired content only, while at the same time taking on a highly personalized nature [Frank, McGuire 2009, p. 59]. It is not hard to question the competitive advantage sources of traditional models based on ownership and a vertically integrated distribution network. On the other side there is the newly emerged sub-market based on the broadband distribution, supported by the services of the Catch-up^[7] or VOD type. Currently, we are experiencing a departure from B2B models, for the benefit of potentially better business models based on a deeper and more direct relation with the end-consumer.

3. Interactivity and content distribution forms

The very concept of interactivity is not unambiguous. The term "interactive television" is frequently used to describe various, diverse types of interactivity. In this case, from all the available layers of interactivity, the most important is the one which allows shaping of the content of television programmes^[8]. The existence of iTV has enabled the so-far passive viewer to create the de facto own individual television programme to a higher and higher degree. This leads to a change of the current multicast transmission. where a particular channel is broadcast to all users, regardless of their expectations and preferences, to an unicast transmission, where only the content requested by the viewer is delivered. Modern programming, recommendations, indicating specific materials - these are the things that differentiate internet television projects from common aggregators of video content. The process of digitisation and convergence has led to transformation of the current model of mass communication[9]; and the decay of its attributes, resulting from this technological progress, and is reflected both in the relations between the broadcaster and the recipient, and in a shift of control of communication over to the recipient. The emergence of iTV in this process has enabled, apart from the rich content, expansion of interaction and such notions as individualization, personalization and asynchronicity. Interactive television is also of special significance for

⁷ Catch-up TV (Replay TV), a VOD service, where television programmes are made available for the period of several days from the first broadcast, see http://en.wikipedia.org/wiki/Video_on_demand#Catch_up_TV (20.04.2012)

⁸ other types of interactivity are: hardware-sensitive interactivity and interactivity with the content presented in television (co-activity)

⁹ the traditional understanding of mass communication is the transmission of uniform content addressed to a massive number of anonymous, socially diverse groups of recipients via technical devices; transmitted content is received publically, the content reaches recipients quickly and at the same time but its availability and up-to-datedness is of short time span.

persons, who haven't used the Internet's resources as of yet, by giving them an opportunity to receive services directly from the screen of their TV set, and control them from a specially designed EPG^[10] navigation interface. As for the typology of forms used in the case of works/programmes transmitted over the Internet, there are basically two technical methods to gain access to television programs - downloading and streaming, although there are many architectures and technologies recommended for use in the interactive television and processing of data. In most cases determination of the architecture depends exclusively on the available technology [Dolan 2001, p. 28]. From iTV's perspective this article focuses only on streaming, a technology which enables network downloading of data as a stream, and commence playback of data as soon as the connection is established. However, streaming itself is not a separate field of exploitation but only a technology used to transmit data in real time (live streaming, real time streaming) or on demand (on-demand transmissions), where it's the user who decides what he wants to view and from which point. Each of the streaming types is associated with the pull technology, where content is downloaded on request of a particular user. Streaming can be divided into webcasting (an equivalent of a communication sent to the public), simulcasting (an equivalent of rebroadcasting) and on-demand services, which in the light of the copyright law is an incident of making a non-linear service available to users. The convention of the operation of iTV is synonymous with the operation of on-demand services, understood as addressed individually and rendered at users' individual requests at specific times [EP 2007, p.332].

4. Consolidation and the television market

The process of consolidation of the television market, both cable operators and TV sat operators, in Poland has become a fact. After the merger of UPC and Aster networks their total market share increased to 32.6 per cent, whereas other operators hold respectively: 17.2 – Vectra, 16.1 – Multimedia [PIKE 2011]. The important factor is that there are additionally several hundred local operators that hold as much as 30.5 per cent of the market and they will surely participate in the subsequent consolidation phase. Another issue is digital platforms. The ITI Group gets rid of the least profitable business in its portfolio - the "n" platform, preserving, at the same time, control over its core business and gaining a new partner – Canal+, belonging to the Vivendi corporation, the owner of Cyfra+. In the resulting joint venture, if it gets approved by the anti-monopoly office [Tellenbach 2012], ITI will keep 32

¹⁰ EPG – Electronic Program Guide, see http://en.wikipedia.org/wiki/Electronic_program_guide (19.03.2012)

per cent of shares, Canal+ will take over the majority share of 51 per cent, and UPC will get 17 per cent. According to experts, this merger will create a new negotiation force for n/C+, and also a chance to form a sort of a power house offering resources and a technology base for other European countries [Wierzchowska 2012, p. 46]. The market share of individual operators is presented on Fig. 1.

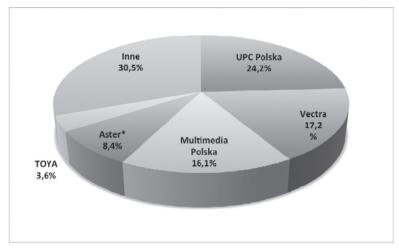


Figure 1. Cable television market in Poland [Source: own studies based on the data from http://www.pike.org.pl/, the Polish Chamber for Electronic Communication (PIKE)].

Digital terrestrial television (DVBT) and the created multiplexes (MUX) bring a significant change to the market structure. In 2012, approximately 70 per cent of the Polish households have already been subscribers of the digital television. There is a risk that some of them - mostly those that subscribe the basic packages – will cancel their paid subscription and switch to DVBT. The cost of entry into the new multiplexes is high and there is no guarantee that future profits will be able to match it. This phenomenon leads to a situation where there is no diversity in available viewing on MUX and in digital television packages (DTH). Consequently, this results in increased irritation between competitors in the thematic channels market, which reduces the strong position of the largest stations. In the period 2005-2012, their share of general viewing time decreased from 78 to 60 per cent. The averaged data from five European countries with the highest on-line television audience index is presented in table 1; for comparison: in the USA, during the same period, average daily on-line television viewing time amounted to 31 minutes.

Table 1. Average viewing time in EU-5 countries in 2010

	On-line TV	On-line TV (per cent)	Linear TV	Linear TV (per cent)
Germany	35 min	13.5 per cent	258 min	86.5 per cent
The United Kingdom	33 min	12.0 per cent	275 min	88.0 per cent
Spain	31 min	11.8 per cent	265 min	82.2 per cent
France	24 min	10 per cent	236 min	90.0 per cent
Italy	20 min	7.6 per cent	266 min	92.4 per cent

Source: own study based on F. Venturini, Bringing TV to life, Issue II, the race to dominate the future of TV, Accenture, 2011, p. 7.

The time spent watching TV still increases, even among younger generations, but live TV is absolutely the biggest element of video consumption, especially in Europe. According to Forrester Research [2010], even in the most advanced digital markets, such as Sweden and the United Kingdom, more than 70 per cent of all the time spent watching TV is spent on live transmissions. Nevertheless, multi-screen viewer population continues to rise, causing at the same time a drop in the number of linear broadcast viewers; in the period 2007-2009 television viewing time for Internet users decreased from 80 to 63 per cent.

Case studies analyzing time spent watching television, conducted by Mindshare, Comscore and BARB [Pounder, Richardson 2011] also highlight the increase of the general daily viewing time for television in their forecast for the period 2010-2020 from 259 to 281 minutes, with the year 2010 as follows respectively: 19 min – iTV, 17 min – Catch-up and 223 min – live broadcast, and for the year 2020: 40 min – iTV, 48 min – Catch-up and 193 min – live broadcast, which still constitutes 70 per cent of the total viewing time. This analysis proves that against popular belief predicting a quick demise of linear broadcasting, it will still make up more than 2/3 of the total content until the end of the decade. Research by E. Frank [Frank 2009, p. 3] indicates that viewing ratings for live broadcasting (309 min) and for linear TV in total (353 min) are still incomparably higher than the viewing ratings for the Internet (49 min out of the total 143 min spent in front of the computer)^[11].

According to research by F. Venturini [Venturini, op. cit.], television content constitutes ca. 80 per cent of the content transmitted via other screens. The Internet has evolved right in front of our eyes. From a medium based on the written word it has transformed into a medium, where multimedia takes precedence. In a few years, 90 per cent of the total network traffic will be

¹¹ the research was conducted for Nielsen Center for Research Excellence, Ball State University in 2009 based on a sample of n=752

audio and video content [Dwornik 2011a, p. 2]. In the period 2007-2012, the time spent watching the four biggest TV stations in Poland shrank from 107 to 71 minutes per day, mainly amongst the age group 13-19, but one must note here that an essential role here is played by social media. Despite this huge drop in viewing time, television content occupies the first spot among the most frequently commented contents on Facebook.

Video content suppliers in the network in Poland have an audience of 17.8 million unique viewing ranges, which during the period 2010-2011 increased by 18 per cent [Dwornik, 2011b, p. 8]. The viewers' group of the internet television exceeded 50 per cent of all the network users already in the middle of the last year, although those users differ in the way they access the video content, which is shown on Figure 2.

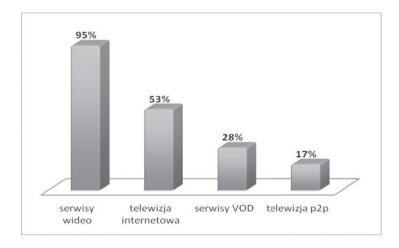


Figure 2. Video content viewed by the Internet users in Poland (2011). [Source: Gemius and Onet . Audio i wideo w sieci (En. Audio & Video in the Network), January 2011]

An investment in the internet field of exploitation comes down mainly to VOD and the Polish video on-demand market players – Ipla application, TVN Player and HBO GO. Although the NBC data indicates only a close to 2 per cent proportion of the non-linear viewing time, a 30-minute daily increase in the total television viewing time has been observed in the period 2007-2012. However, the psychological analysis of a statistical viewer highlights significant differences in the method of the content consumption. The Internet users are accustomed to pay-free content, and their reaction to advertisements is much lower than that of standard viewers. Models of video consumption change fast, and the new consumer profile is more diverse, multi-layered and

requires a non-standard approach [iab, 2010, p. 17]. Active consumption has become more common not only among young people but has also spread onto other demographic segments, and thus the consumers have already got used to receiving content on their own terms, the effect of which is a transfer of the viewers' loyalty from channel brands to content brands. In the future, iTV and the Internet may lead to the creation of a new information-interactive layer, enabling viewers to send feedback information not in form of the content but rather reactions to the content shown on the screen. This would enable massive personalization of the media with the use of social media and the Internet, and - as a result - creation of personalized content layers and ad hoc-created network communities. Facing the strong influence of iTV, manufacturers of home theatre electronics introduce innovations aimed at keeping viewers in front of their TV sets, e.g. the broadcast of 3D programmes or the Smart TV technology.

The mass media market is characterized by deep contrast to the Internet market. While the mass broadcast features the limited content available to many users, the Internet offers the unique content available to unique users. Linear channels generate passive, highly anonymous consumption, whereas the on-line market, by offering interactive capabilities, creates the entirely different consumer experience in regard to the multimedia content. According to M. Fink, M. Covell and S. Baluj [Fink, et al. 2008, p.10] only the strategy of synergy of those two publishing technologies (television and the Internet) will allow reaching a highly competitive market position. As content carrier, on-line video offers multiple possibilities and this potential may cause the internet video content's popularity to overshadow, in due time, the "old-school" television.

5. A model combined with social media

The activity model of television sector companies used in the network allows for combining of content received by the viewer with viewer-related services, available via the Internet. The concept of the operation is based on a combination of consumer-side interface, a server with a database (including television statistics) and the social media application available in the network. When a viewer is watching the X programme, and his/her relatives or friends are watching the same programme at the same time, this creates an ad hoc community and thus allows them to recommend and comment on the content in real time.

Personalization of the broadcast content can take on 4 dimensions, which are: personalized information layers, ad hoc-created communities, popularity ratings in real time and product recommendations based on television content

[Fink, et al. op. cit.]. Such solutions allow integration of television content with any web browser (e.g. Google) and recommendations for purchasing of specific products to viewers, e.g. clothes worn by actors, or help find the closest shop (after entering a zip code), purchase a music file (via e.g. iTunes) or just acquire additional information about places, objects or persons related with a particular scenery seen on the screen. Naturally, this opens a wide range of possibilities for getting the user involved in the distributed content. The model uses the information hashing procedure based on the method of matching with the database located on the server. The Markov model was used to create the matched-pairs [Petrushin 1997, p. 10][12], based on a 66-element set of probabilities resulting from data matching. Finally, the matching model of the probabilities with the content queries (q), database vectors, the network structure, the N number of views (xN), has the following form:

PqxN=n=1415Pqn, xN+nlyn Pynlyn-1

where qn, xN+n is the difference between 32-bit displayed information of vectors qn and xm.

In order to prevent erroneous linking of information, a filtering method was used, taking under consideration the between-channel change time (calculated in seconds L) and historical data (the last 5 seconds), and the matched-pairs were marked Mh and Ch [and the best of them were marked M0 and C0, taking under consideration the so called probability confidence logarithm (Ch=lL)], with the Markov probability e-1/L, where 1 – time duration. If such matching, after taking under consideration historical data, gives different values, the value with the biggest probability index is taken as the final value:

M0,C0=Mh,Ch-l/L if Ch-l/L>C0 otherwise M0,C0

where M0 is the match created by the social media application (the database's answer to the query concerning the content), and M0 and C0 are the queries moved to the next period of time (plus 5 seconds) as Mh,Ch [Fink, et al., op. cit.].

6. Influence of the community on the television content

Since 2000 the analysis of the television market has underlined the outdatedness of the model, where the market power is on the side of the broadcasters, and the reception modes have remained unchanged for years,

¹² see http://en.wikipedia.org/wiki/Markov_model and http://en.wikipedia.org/wiki/Hidden_Markov_model (23.03.2012)

with the simultaneous hardening of programme formats. A new chapter in content management was opened by such solutions as *Google TV or Amazon Instant Video*, which operate globally and independently of the infrastructure. The interesting fact is that competition is intensified by sites operating on the fringe of legality, often within the grey zone, such movie2k.to or kono.to [Roland Berger 2012, p.4]. For example, in Germany there are 250 traditional broadcasters and 1000 VOD service providers. Such competition on one hand, and spotting potential viewers on the other, make linear broadcasters more inclined to use the cross-function models. The British X-Factor has gathered almost 4 million fans on its facebook fanpage, and American Idol, slightly more than 7 million (on seven fanpages in total) [Roland Berger, op. cit.]. Thus, as the natural order of things, the currently manufactured TV sets (Samsung, Loewe) enable access to both VOD and the social network applications, and in case of game consoles such as *Xbox* or *Playstation 3*, Sony allowed transfer of the content available in BBC, HBO and Sky.

With a high degree of probability we can predict that television, as it is today, will cease to exist by the end of the decade. The struggle for its future continues, mostly due to the changes that occur in the area of technology, market layout and shared content. Their nature goes in the direction of building the network composed of linear television content, video materials, communities, the Internet, and also of content generated by users themselves. The last years have seen a tremendous change. Media centres, such as Hulu/Netflix or iPlayer created by BBC, which have made the premium content available globally, can serve as an example. This has led to emergence of a new business model form, making broadcasters into a peculiar hybrid construct similar to a content shop [Hansen 2005, p. 38]. The interactive HBB^[13] standard allowed to combine - at the same time - television content with the Internet on a single platform.

Research by Roland Berger [op. cit.] shows that by the year 2020 the nature of those changes will be even more profound. Players that publish video content on-line (OTT^[14]), will become part of the television market, forming at the same time the new competitive advantage configuration of powers of the media macro-environment. The market will surely expand with players and products like: Facebook, Google+, Apple TV (including iTunes), YouTube, Netflix or Hulu [emedia Institute, 2012, p. 6], which - when entering the new business areas - will make users-viewers themselves decide on a type of content they want to view. The people's choice of television programmes is more and

¹³ HBB or HbbTV – is both an industrial standard and a promotional initiative of a hybrid digital television aimed at harmonising the broadcast, IPTV (iTV), and the broadband delivery of entertainment to the end consumer via Smart TVs and set-top-boxes, after: http://www.hbbtv.org/ (23.04.2012)

¹⁴ OTT (over-the-top content), on-line delivery of the audio and video content without the Internet service provider (e.g. Comcast, Verizon), see http://en.wikipedia.org/wiki/Over-the-top_content (23.04.2012)

more often based on viewers opinions published on Facebook. In the USA it is common to verify opinions of programmes using Google TV and smartphones, which is evident proof that the TV set's remote controller is used less and less frequently. Availability of the Internet in the TV set enables efficient verification of content, followed frequently by an on-line purchase of the content.

The model of the broadcasting programmes in real time fades out at a bigger and bigger rate due to implementation of product innovations such as digital set-top-boxes, on-demand services and high-speed data transmission. OTT providers are quickly becoming a strong competition for traditional broadcasters, offering each user the ability to playback the content multiple times. The very access to unique content, with the biggest revenue generating capabilities, ignites real interest of users and consumers on the market, leading to the abolishing of entry barriers to the television ecosystem. Currently, access to technology drives content's success, but one may state with a strong conviction that quite soon this success will be warranted by the ability to gain a high level of attention and interest of the network users. Only the broadcasters with the unique - also quality-wise - content will be able to promote and sell diversified formats of the owned content, using the network communities which more and more often are the element that co-creates the television content.

Social networks will make it possible to create one's own television schedule, a quasi-programme format, taking under consideration opinions of other users, just as is already happening in the American market, where on average item may become mass-recommended and viewed when it gathers 500 "Likes" on Facebook [Roland Berger, op. cit.]. For the first time in the history of television viewers' opinions are gaining significance - they are becoming an opinion-forming source for creation of video content. The Facebook culture is starting to affect alarger number of markets and this phenomenon is accelerating rapidly. On-demand services, on-line recommendations and Catch-up are starting to replace electronic guides and convergent services. The ability to view content on a computer screen and receive additional formats on tablets and smartphones has become the new and rapidly growing content viewing method.

7. The new competition framework

The interactive television market is currently in the process of formation, but its analysis in the international perspective allows us to distinguish the key players which differ by elements of competitive advantage, content delivery and transmission method. This enables us to distinguish four main groups with similar features in the area of: content, services, devices and availability of solutions "in the cloud" [Salil, et al. 2012, p. 27].

On the content side there are traditional broadcasters that see iTV's potential and which want to deliver content themselves without involvement of third parties; on the other hand those companies must be very vigilant not to lose their current strong position on the linear broadcast market. The advantage group of the service nature is limited basically to the telecommunication companies which aggregate consumption of combined services (triple play/ four play). Those companies play here the role of a universal interface for the user from any device^[15]. In the hardware advantage group there are of course the manufacturers (of computers, TV sets with set-top-boxes, tablets, mobile phones and smartphones) that have the means to create their own VOD platform. The new concept in these cases is the afore-mentioned cloud computing^[16], a processing model based on the use of services provided by third parties. Functionality is understood here as a service (providing added value for the customer) offered by a particular piece of software (and the necessary infrastructure). This eliminates the need to purchase licenses or install and administer software and enables distribution of video to any device connected to the Internet. Although this group may lack media market experience in concluding content-unique contracts, it has managed to develop the key ability to capture and manage on-line needs and behaviours of consumers. The new competition layout in the graphical form is presented on Figure 3.

¹⁵ in most cases having the CDN (Content Delivery Network), having the ability to ensure adequate quality of services

¹⁶ Cloud computing, see http://en.wikipedia.org/wiki/Cloud_computing (23.04.2012)

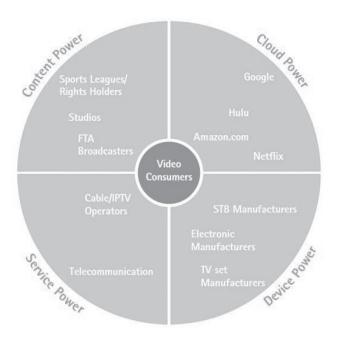


Figure 3. New competition layout on the television market [Source: own study based on F. Venturini, Bringing TV to life, Issue II, the race to dominate the future of TV, Accenture, 2011, p. 10]

Interactive television creates a new market quality and at the same time destroys the notion of a viewer as a passive participant in the communication process. A combination of the mass influence of television broadcasting and the Internet's flexibility generates the ability to create new products and solutions. However, implementation and deployment of iTV in connection with the power of the social media is a highly delicate process, which requires advanced dexterity in creating product images and conveying them to potential consumers. iTV provides a countless number of useful applications which increase the general comfort of using television. Interactive services should be viewed as a part of the general television provisioning infrastructure, although in order to offer this kind of service and meet consumers' requirements one should allow certain experimenting [Withnell 2006, p. 3]. Content providers, broadcasters and network owners must continue to develop, and perfect the process of creating interactive services. We have learnt quite a lot about interactive television throughout recent years and this knowledge may come in handy when creating new interactive services for iTV.

Interactive television leads a double life both as an element of conflict and harmony of social communities, becoming less of an issue of interactive content and context services, and more of an issue of compliance with the increase in the level of social entertainment and, in a sense, aspects of human, new dimension of television consumption [Christensen 2009, p. 9]. According to Susan Fournier from Harvard Business School, if television companies want to restore growth in their brand loyalty level they must reject a single, accepted on a large scale, all-matching model and learn how to understand requirements of the new consumer, and then match their brand and the offered products to the consumer [Maad 2011, p.10].

8. Digital strategy vs. Social strategy

Social strategy has an advantage over digital strategy used so far, because the basis of a community are the ties and relations between people, and not between not companies. A company which applies this kind of strategy helps its customers (and in case of television - its viewers) establish and strengthen relations, bringing benefits for either of the parties in the form of the value innovations [Kim, Mauborgne 2005, p. 68].

Nowadays, broadcasters focus mainly on application of the digital strategy, involving the broadcast of advertisements and getting the feedback from consumers to improve activities of the marketing nature, but first of all to strengthen the sales force. Whereas in the social strategy, by building relations between users and the company, apart from establishing ties, we get (e.g. through viewer recommendations) free labour on behalf of the company [Piskorski 2011].

As mentioned above, the contemporary user is not interested in either advertisements or the ability to send feedback to the company, because relations that the Internet users and viewers want to establish are with people and not with companies. In this regard success is enjoyed by the companies that execute a social strategy in three dimensions:

- 1. reduce costs or encourage viewers to increase their spending,
- 2. help establish or strengthen relations,
- 3. do this in exchange for workdone at no charge on behalf of the company [Piskorski, op. cit.]

9. Conclusions

Both technological and business innovations have a decisive effect on the mechanisms of distribution in the television business. This poses a particular risk for broadcasters due to market maturity and the lack of identification of contemporary consumers' needs. However, instead of implementing tactical and ambitious plans to introduce new products and new services, companies must

make a transition to a more structured social strategy based on cooperation with consumers. The necessity of this cooperation results from the lack of suitable knowledge and operating experience on the newly reconstructed television market. Activities of the social nature directly affect the efficiency of operation of the interactive television and its further development.

Broadcasters will continue in the direction of the business-to-consumer activities, providing users with unlimited access both to the linear broadcast and the non-linear broadcast linked with the network communities, also taking advantage of the possibilities that the competition model based on operating "in the cloud" offers.

Naturally, there is no such thing as a single direction of development of the television market and it is difficult to give one recipe for success. However, one can surely claim that only ignoring the model based on the competition itself and noticing the possibilities arising from cooperation with communities will allow the companies to survive on the market. Failure to see this market shift will surely be taken advantage of by new players that notice the new possibilities and utilize the quick progress of technology. They will barge onto the television market with an impact, winning masses of new, demanding but open to new possibilities of interaction viewers.

References

- 1. Adams M., Anand P., Fox S., *Interactive Television: Coming to a Screen Near You*, New York: TV Books, 2001
- 2. Austerberry D., *The Technology of Video and Audio Streaming*, Elsevier 2005
- 3. Barta J., Markiewicz R., *Telewizja interaktywna a prawo autorskie*, Wolters Kluwer Polska, Warszawa 2007
- 4. Christensen L.H., *Out of Interactive TV*, VR Media Lab & Dept. of Communication, University of Aalborg, 2005
- 5. Dalmas R., Molina J., Navarro-Grau M., Sugiyama A., *From Vertical to Concentric*. Kellogg TechVenture 2001 Anthology, 2001
- Dolan M.A., Report on Television Data Applications, U.S. Department of Commerce Information Technology Laboratory National Institute of Standards and Technology Gaithersburg, MD 20899-8900, July 2001
- 7. Dwornik B. (a), *Raport: Multimedia w Internecie*, November 2011, interaktywnie.com
- 8. Dwornik B. (b), *Raport: Wideo w Internecie*, June 2011, interaktywnie. com
- 9. Ellis J., Seeing Things: Television in an Age of Uncertainty, London, I.B. Taurus, 2000

- Fink M., Covell M., Baluja S., Social- and Interactive-Television Applications Based on Real-Time Ambient-Audio Identification, Center for Neural Computation, Hebrew University of Jerusalem, Google Research, Google Inc., 2008
- 11. Frank A., McGuire M., Hype Cycle for Emerging Technologies: Interactive television, Gartner Research, ID Number: G00205757, 2011
- 12. Frank E., Research VP, Media IAS, TV 2.0 Technology and Impact, NABA Washington D.C. June 4, 2009
- 13. Gawlinski Mark, *Interactive television production*, Elsevier Science, 2003
- 14. Hansen V., *Interactive Television Design*, Designing for interactive television v 1.0 BBCi & Interactive tv programmes, 2005
- 15. Jaskiernia A., *Publiczne media elektroniczne w Europie*, Oficyna Wydawnicza ASPRA-JR, Warszawa 2010
- 16. Kim W.Ch., Mauborgne R., *Strategia błękitnego oceanu*, MT Biznes, 2005
- 17. Lugmayr A., Niiranen S., Kalli S., World of Digital Interactive TV, [w:] Digital Interactive TV and Metadata, Future Broadcast Multimedia, Springer, 2004
- Lougos C., Vassilopoulou K. and Vrehopoulos, A., Interactive Digital TV services - Viewer's Perceptions, eBusiness and eWork Conference, Prague, 2002
- Lytras M, Lougos C., Chozos P., Pouloudi A., Interactive Television and e-Learning Convergence: Examining the Potential of t-Learning, Athens University of Economics and Business, Greece Department of Management Science & Technology, 2002
- 20. Maad S., *The potential and pitfall of Interactive TV Technology: An Empirical Study*, Fraunhofer, Institute For Media Communication (IMK) Germany, 2011
- 21. Olko J., Fatyga R., *Wdrażanie systemów telewizji interaktywnej aspekty techniczno marketingowe*, Instytut Telekomunikacji i Akustyki, Politechnika Wrocławska, Wrocław, 2011
- 22. Petrushin V.A., *Hidden Markov Models: Fundamentals and Applications Part 1: Markov Chains and Mixture Models*, Center for Strategic Technology Research, Accenture, 1997
- 23. Piskorski M. J., *Social Strategies That Work*, Harvard Business Review, November 2011
- 24. Pounder J., Richardson L., Mindshare, *Comscore & BARB*, Future of Television, 2011
- 25. Salil D., Pankaj A., Biyani R., *To the Cloud: Cloud Powering an Enterprise*, McGraw-Hill Publ., 2012

- 26. Ślężak P., Pola eksploatacji utworów audiowizualnych, Bydgoszcz 2005
- 27. Swann P., TV dot Com: The Future of Interactive TV, New York: TV Books, 2000
- 28. Tellenbach M., *Merger of the "n" platform with Cyfra+ by the end of Q3*, press release dated 11.05.2012 r., wirtualnemedia.pl,
- 29. Van Dijk J., De Vos L., *Searching for the Holy Grail*, New Media & Society, Vol 3:4, 2001
- 30. Venturini F., *Bringing TV to life*, Issue II, the race to dominate the future of TV, Accenture, 2011
- 31. Wierzchowska J., *Raport Bloomberg Businessweek Polska: Rewolucja TV*, Bloomberg Businessweek nr 05/2012, 5-18 marca 2012
- 32. Withnell J., Interactive TV Services for IPTV, Long Dog, 2006

Research reports

- 1. e-Media Institute, Web-TV Intelligence & Strategies: Performance of broadcasters channels, 03.03.2011
- 2. Forrester Research, *The European Three-Screen Audience Is Growing*, But TV Still Reigns, 22.04.2010
- 3. Gartner Industry Research, Two roads to TV 2.0, 24.03.2009
- 4. Gartner, *Emerging Technology Analysis: Broadband-Connected Televisions*, Consumer Technologies, 23.09.2010
- 5. Gemius i Onet, Audio i wideo w sieci, January 2011
- 6. Interactive Advertising Bureau (iab), *Platform Status Report: Interactive Television Advertising Overview*, 2010, s.17
- 7. European Parliament (EP), Proposal for a Directive of the European Parliament and of the Council Amending Council Directive 89/552/EEC on the coordination of certain provisions laid down by law, regulation on administrative action in Member States concerning the pursuit of television broadcasting activities, Official Journal of the European Union, 18.12.2007
- 8. Polska Izba Komunikacji elektronicznej (PIKE), http://www.pike.org. pl/, data for 3Q 2011
- 9. Roland Berger Strategy Consultants, *Video-Endgame. think:act Content. Fresh thinking for decision makers*, 17.01.2012

III. MODERN TOOLS FOR BUSINESS AND NON-PROFIT ORGANIZATIONS MANAGEMENT

Jarosław Jabłoński* Andrzej Lis**

LESSONS LEARNED SYSTEM AS A TOOL OF MANAGING ORGANISATIONAL KNOWLEDGE: THE CASE OF MILITARY ORGANISATIONS

Abstract

The aim of this paper is to analyse the Lessons Learned systems applied by military organisations as the tools of organisational learning and managing organisational knowledge. Firstly, the concept of learning from experience has been discussed from the perspective of military organisations. Then, applying the NATO model, the elements of Lessons Learned capabilities have been enumerated and studied. The case study combines observations, lessons and best practices identified in NATO, the U.S. Army and the Polish Armed Forces. The contents of the paper are based on the outcomes of the critical analysis of military documents, the literature survey, the observation method and the unstructured interviews with experts.

Key words: Information and Knowledge Management, organisational learning, experiential learning, Lessons Learned capability, Lessons Learned process, NATO Joint Analysis and Lessons Learned Centre, U.S. Center for Army Lessons Learned, Polish Armed Forces Doctrine and Training Centre

1. Introduction

Knowledge Management and organisational learning are some of the "hottest" issues in the theory and practise of managing contemporary organisations. Traditionally, these concepts are associated with business organisations. In effect, the majority of scientific research is focused on the exploration of business entities. Nevertheless, the urgency to develop and to implement Knowledge Management solutions and organisational learning systems is also recognised beyond a for-profit sector. Military organisations

^{*} Col., M.A., the Polish Armed Forces Doctrine and Training Centre, Bydgoszcz.

^{**} Lt.Col., PhD, the Polish Armed Forces Doctrine and Training Centre, Bydgoszcz; the Department of General Management, the Faculty of Economics and Management, Nicolaus Copernicus University, Toruń.

belong to the leaders within this area. Learning from prior wars, campaigns and battles has always been the force driving the development of military strategy, operational art and tactics, and determining the technological advancement of armaments and military equipment. Therefore, the armed forces were natural predecessors of the development of organisational learning capabilities. For instance, as early as in the 1970s, some systematic Lessons Learned initiatives were launched in NATO (Permanent Analysis Team) and the U.S. Army (After Action Reviews/Reports). Since then, these capabilities have been strengthened and developed. The Polish Armed Forces established their first Lessons Learned capabilities in the 2000s as a response to the requirements of troops deployed abroad to operations in Afghanistan and Iraq. Contemporary, information and knowledge management based concepts are considered as core elements of NATO transformation processes. The Lessons Learned procedures and solutions applied in NATO, the U.S. Army and the Polish Armed Forces may be inspiring examples for other organisations, including for-profit companies. Nevertheless, military organisations are rarely explored by civilian research. Therefore, the aim of this paper is to fill this gap and to study the Lessons Learned systems applied by military organisations as the tools of organisational learning and managing organisational knowledge. In order to achieve the above stated aim, the following operational objectives have been set:

- to outline NATO's approach to the Knowledge Management concept;
- to identify the assumptions and major building blocks of the NATO's Lessons Learned capability;
- to analyse the elements of Lessons Learned capabilities in the NATO military structure, the U.S. Army and the Polish Armed Forces;
- to identify best Lessons Learned practices in military organisations which can applied in other sectors.

The contents of the paper are based on the outcomes of a critical analysis of military documents, a literature survey, the observation method and unstructured interviews with experts. The analysis of military documents included: doctrines, directives, handbooks and manuals. Due to the limitations on public access to some military publications, in a few cases they have been cited or quoted with the assistance of secondary sources. The literature survey encompassed: books, articles and Internet publications, both of military and civilian origin. The results of the literature survey and documentation analysis have been compared and contrasted with observations noted by the authors during their service in the Polish Armed Forces Doctrine and Training Centre. Moreover, the opinions of Lessons Learned staff officers from the NATO Joint Analysis and Lessons Learned Centre (JALLC), the U.S. Center for Army Lessons Learned (CALL) and the Polish Armed Forces Doctrine and Training Centre (PAF DTC) have contributed to the study.

The article consists of two chapters. In the first chapter, attempts have been made to study the assumptions of the concept of learning from experience in military organisations. In order to provide the background for the following analysis, NATO's approach to Knowledge Management has been outlined. Subsequently the nature and major building blocks of NATO's Lessons Learned capability have been identified. In the second chapter, elements of Lessons Learned capabilities in NATO, the U.S. Army and the Polish Armed Forces structures are looked at. The analysis encompasses Lessons Learned structures, processes and tools. Finally and equally important, some best practices deemed to be applicable in other sectors are identified.

2. Learning from experience as a component of Knowledge Management

Information and Knowledge Management

Knowledge Management (KM) is one of the most widespread and popular contemporary management concepts. Deeply embedded within the resource based approach to managing organisations in a highly turbulent and multidimensional environment, the Knowledge Management concept perceives knowledge as the primary source of competitive advantage (cf. Koźmiński 2005, p. 96). According to Barney (1991, p. 112), an organisation's resources need to be valuable, rare, imperfectly imitable, and non-substitutable in order to become the foundation of a competitive advantage. Defined as "a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information" (Davenport and Prusak 1998, p. 5), knowledge is an intangible resource characterised by the uncertainty of applications and associated risks, effects, property rights and investments (cf. Koźmiński 2005, p. 97). Therefore, knowledge has a natural potential to become a strategically important resource and the basis of a sustainable competitive advantage. However, due to aforementioned features, managing knowledge is recognised as a challenge.

As any organisational resource, knowledge is subjected to management processes including planning and decision making, organising, leading and controlling aimed at "achieving organisational goals in an efficient and effective manner" (Griffin 2008, p. 4). In accordance with the process-oriented approach, Knowledge Management is defined as a set of activities encompassing: knowledge identification, acquisition, development, distribution, preservation and use undertaken by organisations in order to achieve knowledge goals (Probst 1998, p. 19). Traditionally, Knowledge Management is associated with business organisations. Nevertheless, the urgency to develop knowledge

management systems and solutions is widely recognised beyond a for-profit sector. For instance, NATO is a good example of the organisation drawing a lot of attention to managing knowledge. As Hutson (2011, p. 46) observes information superiority was acknowledged as one of the priorities by the NATO Summit at Riga in 2006. In effect, the most up-to date concepts and capabilities such as NATO Network Enabled Capabilities (NNEC), Knowledge Development (KD) and Comprehensive Approach (CA) are "data driven and information rich". In order to establish the assumptions and rules of Information and Knowledge Management (IKM) and to strengthen common efforts within this area, in 2007, the NATO Information Management (PDIM) followed one year later. Simultaneously, the Allied Command Operations (ACO) and Allied Command Transformation (ACT) developed their IKM Vision and Strategic Concept and endorsed the Bi-Strategic Command Information and Knowledge Management Directive.

The aforementioned IKM directive distinguishes between Knowledge Management and Information Management. Such an approach follows the commonly accepted distinction among knowledge, information and data (cf. Davenport and Prusak 1998, pp. 1-6; Firestone and McElroy 2003, pp. 17-20). According to the NATO understanding, Knowledge Management is defined as a "multidisciplined approach to achieving organisational objectives by making the best use of information, expertise, insights, and Best Practices" (Bi-SC IKM Directive 2008, as cited in Hutson 2011, p. 47). Information Management denotes "the discipline that directs and supports the handling of information thorough its life-cycle ensuring it becomes the right information in the right form and of adequate quality to satisfy the demands of an organisation" (Bi-SC IKM Directive 2008, as cited in Hutson 2011, p. 47). The process-oriented approach to Information Management, resembling the Probst's model of Knowledge Management, is observed in the NATO Glossary of Communication and Information Systems Terms and Definitions. The document defines Information Management as the "means through which an organisation maximizes the efficiency with which it plans, collects, organises, controls, disseminates, uses and disposes its information and through which it ensures that the actual value and the potential value of that information is identified and exploited to the fullest extent"(AAP-31A 1998, p. 2.17).

Effective and efficient Knowledge Management and organisational learning are the foundations of learning organisations. In his seminal work, Senge (1999, p. 3) describes learning organisation as an organisation "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning

how to learn together". The aim of transforming into a Knowledge Centric Organisation is declared in the NATO Bi-Strategic IKM Vision. As stated in the aforementioned document: "The NATO Military Structure will transform into a Knowledge Centric Organisation (KCO) that deliberately and systematically exploits NATO information and expertise, and proactively manages its information and KM processes. The NATO strategic commands will promote an organisational culture that fosters information and knowledge sharing and treat information, expertise, experience, and Best Practice as valuable assets, as a fundamental capability required to achieve decision superiority" (Bi-SC IKM Vision and Strategic Concept 2007, as cited in Hutson 2011, pp. 48-49).

Summarising, contemporary military organisations appreciate the significance of knowledge as an organisational resource. Information and Knowledge Management is recognised by NATO as one of its priorities what is mirrored in official policies, directive and strategic documents. NATO's understanding of the IKM concept and its assumptions is convergent with the theoretical framework developed by business management studies. Military organisations highly value learning from experience. Learning from prior wars, campaigns and battles has always been the force driving the development of military strategy, operational art and tactics, and determining the technological advancement of armaments and military equipment. Therefore, the armed forces have developed Lessons Learned capabilities, which will be studied in details the following section.

Lessons Learned

Exploring the nature of knowledge, Firestone and McElroy (2003, pp. 3-5) point out the role of learning from experience. As they observed, according to modern pragmatism, "knowledge is understanding based on experience". They quote Allee (1997, p. 27) who defines knowledge as "experience or information that can be communicated or shared" and Argyris (1993: 2-3) who claims that "knowledge is the capacity for effective action". Learning from experience seems to be one of the prerequisites of the learning organisation understood as "a place where people are continually discovering how they create their reality. And how they can change it" (Senge 1999, p. 13). This point of view is shared by military servicemen. The commander of the NATO Joint Analysis and Lessons Learned Centre, Brig. Gen. Sonneby highlights in his foreword to NATO LL Handbook: "In a successful learning organisation, lessons are identified and turned into lessons learned effectively and efficiently; the organisation's Lessons Learned capability enables the organisation to reach its full potential" (NATO LL Handbook 2011).

As already mentioned, learning from previous experience is highly valued in the armed forces. Vego (2007, p. XI-43) claims that "learning proper lessons is one of the key prerequisites for any military organisation to avoid repeating errors and mistakes next time in combat". The remedial actions introduced in the U.S. Navy and Marine Corps in the Pacific as the result of Lessons Learned from the bloody amphibious assault of the Tarawa Atoll in November 1943 are a classical case of the value of learning from experience (Hallet et al. 2009, p. 39). Some other interesting historical examples are provided by Vego (2007, pp. XI.43-80) in a chapter devoted to operational Lessons Learned in his work on the theory and practice of joint operational warfare.

A NATO Lesson Learned is defined as "an improved capability or increased performance confirmed by validation when necessary resulting from an implementation of one or more remedial actions for a lesson identified" (Bi-SCD 80-6 2011, as quoted in NATO LL Handbook 2011, p. 13). Learning from experience and implementing continuous improvements are the key points of the NATO's understanding of the Lessons Learned process. As officially declared, the aim of the Lessons Learned procedure is "to learn efficiently from experience and to provide validated justifications for amending the existing way of doing things, in order to improve performance, both during the course of an operation and for subsequent operations" (AJP-3(B) 2011, p. 4.19). Observations, insights and lessons may relate to both tangible and intangible elements of military capability. They may be identified and learned at all levels of military hierarchy from the rank and file to four-star generals. Vego (2007, p. XI-43) distinguishes between technological, tactical, operational and strategic Lessons Learned. According to his classification, "technological lessons are derived from the combat use of weapons, and their platforms and equipment. (...) Tactical lessons are deduced from the study of planning, preparing, and executing battles, engagements, strikes and other tactical actions. In contrast, operational lessons are deduced from a thorough study of all aspects of major operations and campaigns in peacetime exercises, war games, and combat. Strategic lessons are learned from the comprehensive study and analysis of a war as a whole and its political, diplomatic, military, economic, international, and other aspects'[1].

Lessons Learned are expected to increase the effectiveness of commanders, headquarters and forces. In order to effectively manage organisational learning in a joint, combined and highly turbulent operational environment, the development of a Lessons Learned capability seems to be indispensable.

¹ It should be emphasized that the military hierarchy of command levels is different from the civilian classification of management levels. In military organisations, the tactical level is located at the bottom of the hierarchy while the operational level is an intermediate echelon between tactics and strategy. In business organisations, the hierarchy is reversed. Compare and contrast: AJP-3B (2011, p. 1.2) and Griffin (2008, pp. 172-175).

According to the guiding directive established at the level of the NATO strategic commands, "a Lessons Learned capability provides a commander with the structure, process and tools necessary to capture, analyse and take remedial action on any issue and to communicate and share results to achieve improvement" (Bi-SCD 80-6 2011, as quoted in NATO LL Handbook 2011, p. 9). The graphical representation of the NATO approach to a Lessons Learned capability is presented in Figure 1.

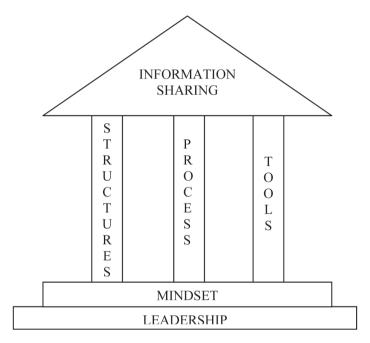


Figure 1. The Lessons Learned capability [Source: *Bi-SC Directive 80-6 Lessons Learned*, 06 July 2011 as cited in: *The NATO Lessons Learned Handbook*, Joint Analysis and Lessons Learned Centre, Second edition, September 2011, p. 9.]

The aforementioned model encompasses core elements of NATO Lessons Learned capability, its foundations and key success factors (KSFs) necessary for its implementation. The key components represented in Figure 1 as the pillars of the "Lessons Learned house" include: structures, processes and tools. Leadership and mindset make up the foundation while information sharing constitutes the capstone. The engagement of leaders, positive mindset, willingness to share information and stakeholder involvement combined all together are considered to be the key (critical) success factors for a Lessons Learned capability (Bi-SCD 80-6 2011, as cited in NATO LL Handbook 2011, pp. 9-10).

Summing up, the literature survey and analysis of the approach by military organisations to learning from experience prove that Lessons Learned constitute one of the key building blocks of managing organisational knowledge. In accordance with NATO's understanding, learning from experience and implementing continuous improvements are the core components of the Lessons Learned concept. Lessons identified and learned at all levels of a military hierarchy may encompass both tangible and intangible elements of a military capability. Simultaneously, a Lessons Learned capability needs to be developed in order to effectively manage organisational learning. Positive attitudes and behaviours of commanders and all servicemen seem to be the key success factors for a Lessons Learned capability. In the following chapter, Lessons Learned structures, processes and tools applied in NATO's military structure, the U.S. Army and the Polish Armed Forces will be analysed and discussed thoroughly.

3. Elements of a Lessons Learned capability

Structures

The Lessons Learned structure is defined as the "skilled and dedicated LL personnel allocated to adequate posts within an organisation" (Bi-SCD 80-6 2011, as quoted in NATO LL Handbook 2011, p. 10). The analysis of the Lessons Learned structures will be conducted from two perspectives. First of all, the bodies responsible for the NATO Lessons Learned capability will be identified. Secondly, the organisation of the Polish Armed Forces Lessons Learned system will be studied.

Recognising the paramount importance Knowledge Management plays in a multidimensional and turbulent operational environment, NATO has established a Lessons Learned capability. Hallet et al. (2009, pp. 39-41) identify the key Lessons Learned actors within the NATO structure. The Alliance Lessons Learned policy is set up by NATO Headquarters including the North Atlantic Council (NAC), the International Staff (IS), the Military Committee (MC) and the International Military Staff (IMS). Then, the policy is implemented by two strategic commands. Allied Command Operations (ACO) is responsible for planning, preparing and conducting combined, joint and effect-based military operations^[2]. Therefore, ACO, its subordinated Joint Forces Commands (Brunssum, Lisbon and Naples) and deployed forces are on one hand the key providers of observations and reports (cf. AJP-3(B) 2011, pp 4.19-20) while on the other one the major

² http://www.aco.nato.int/visionmission.aspx (date of access: 04 June 2012).

beneficiaries of Lessons Learned. The second of strategic commands, Allied Command Transformation (ACT) is recognised as the "NATO's leading agent for changing, driving, facilitating, and advocating continuous improvement of Alliance capabilities to maintain and enhance the military relevance and effectiveness of the Alliance"^[3]. Through its subordinated NATO's triple Js (JWC, JFTC and JALLC), ACT provides training support to operational forces and leads the transformation of military capabilities. In regards to Lessons Learned, the Joint Warfare Centre (JWC) and the Joint Force Training Centre (JFTC) incorporate lessons identified during operations into the pre-deployment training, whereas the Joint Analysis and Lessons Learned Centre (JALLC) assists the Alliance as a learning organisation. The JALLC is the key player in the NATO Lessons Learned system.

According to its mission the JALLC is "NATO's centre for performing joint analysis of operations, training, exercises and Concept Development and Experimentation collective experiments, including establishing and maintaining an interactive managed Lessons Learned Database (LLDB)"^[4]. The JALLC is the successor of the Permanent Maritime Analysis Team (PAT) established in 1978 in Northwood, the United Kingdom. PAT personnel formed the core of the analysis teams of NATO operations IFOR and SFOR in the Balkans in the 1990s. The need to establish a standing analysis capability within NATO was one of the lessons identified in those operations. In 1997, the NATO Military Committee (MC) officially approved the operational requirement for the JALLC. On the decision of the North Atlantic Council (NAC), the organisation was officially established in 2002 and it declared its full operational capability (FOC) four years later^[5].

Joint analysis are the JALLC's centre of gravity. As stated in its vision, the JALLC effort is focused on becoming recognised as the "NATO's leading agent for a joint analysis with [...] efforts and products respected, thereby enabling [...] contribution to improve the capabilities of the Alliance." [6] Nevertheless, it should be emphasized that in the JALLC the analyses are perceived in a wider context as one of the stages of the lessons learned process. According to the NATO military command structure approved at the Prague Summit in 2002, the JALLC is subordinated to Allied Command Transformation (ACT). The JALLC peace establishment numbers 50 posts departmentalised functionally in seven branches (cf. Figure 2). As the

³ http://www.act.nato.int/index.php/organization/hq-sact/mission (date of access: 04 June 2012).

⁴ http://www.jallc.nato.int/aboutjallc/missionandvision.asp (date of access: 29 May 2012).

⁵ http://www.jallc.nato.int/aboutjallc/aboutjallc.asp (date of access: 29 May 2012).

⁶ http://www.jallc.nato.int/aboutjallc/missionandvision.asp (date of access: 29 May 2012).

organisation emphasizes, it seeks a "balance between scientific expertise and operational experience provided by a mix of military (credibility), civilian (continuity) and contractor (flexibility) analysts [which] is essential to ensuring high-quality, insightful JALLC products".^[7]

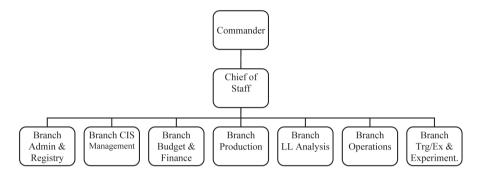


Figure 2. The JALLC internal organisation [Source: http://www.jallc.nato.int/aboutjallc/organization.asp (date of access: 02 June 2012)].

The JALLC structure covers both primary activities (the Lessons Learned Branch, the Operations Branch, the Exercise/Training and Experimentation Branch, the Production Branch) and support activities (Admin and Registry, CIS Management, Budget and Finance). The Lessons Learned Branch grouping 40% of manpower is the core element in the organisation. In total, 70% of the personnel is allocated in primary activities branches. As already mentioned, the JALLC internal organisation design is based on the functional approach to departmentalisation. Nevertheless, the organisation officially declares operating "a matrix management system whereby the Operations Branch and the Exercise/Training and Experimentation Branch manage the analysis projects within their respective functional areas, and the Lessons Learned Analyst Branch provides the majority of manpower resources for projects including the analysis project managers where necessary. The role of the Production Branch is to provide scientific operational analysis support to analysis projects, to manage the NATO Lessons Learned Database (LLDb), and to provide editorial support to JALLC activities"[8].

The Polish Armed Forces introduced the Lessons Learned system in 2007. Initially, the focus of the system was given exclusively to Lessons Learned from military operations abroad. Gradually, its scope has expanded

⁷ http://www.jallc.nato.int/aboutjallc/organization.asp (date of access: 02 June 2012).

⁸ http://www.jallc.nato.int/aboutjallc/organization.asp (date of access: 02 June 2012).

and covered other areas including peacetime functions, troops training and military exercises. Nevertheless, in its early days there were no full time structures within the system. In recognition of the increasing importance of organisational learning, the concept of the development of the Polish Armed Forces Lessons Learned system was launched in 2009. Standing Lessons Learned capabilities were built. In 2010 the Polish Armed Forces Doctrine and Training Centre (PAF DTC) was established. One year later the Centre achieved its full operational capability. Full time Lessons Learned branches were set up at headquarters at the operational level including: Operational Command, Land Forces Command, Air Forces Command, Navy Command, Special Forces Command, Inspectorate for the Armed Forces (joint logistics) and Inspectorate of Medical Support. At the tactical level (divisions/flotillas/ air wings and below), Lessons Learned are collected and managed by commanders and double-hatted staff officers (specialists) who are tasked to perform LL responsibilities as additional duties. In effect, the revised, comprehensive and multi-level system inaugurated on January, 1st 2012. The early days and transformation processes of the Lessons Learned system are analysed, from the Land Forces perspective, by Fiederek (2012, pp. 39-42). The Doctrine and Training Centre is an organisation responsible for promoting and coordinating Knowledge Management initiatives in the Polish Armed Forces. Therefore, it is the key player within the national Lessons Learned system. Beside maintaining and strengthening Lessons Learned capabilities, the Centre covers two other domains: Operational Standardisation and Concept Development and Experimentation (CD&E). PAF DTC is set up at the strategic level and is subordinated directly to the Chief of the PAF General Staff (Chief of Defence - ChOD). The internal organisation of PAF DTC includes two departments (staff divisions) responsible for primary activities and two supporting elements (cf. Figure 3).

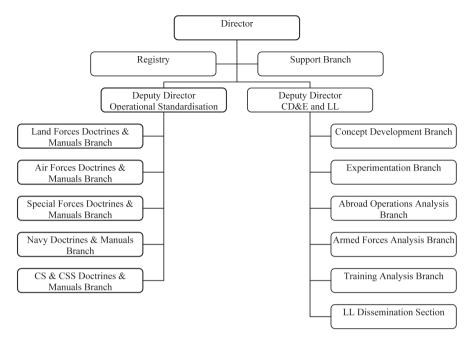


Figure 3. The PAF DTC internal organisation [Source: http://www.cdis.wp.mil. pl/en/48.html (date of access: 02 June 2012)].

Within the PAF DTC organisational design, the Lessons Learned capability is combined and placed under one umbrella with Concept Development and Experimentation. Due to the fact that these two capabilities share some common points, such a solution enables us to achieve the effect of synergy between them. The core Lessons Learned personnel is grouped within three Analysis Branches responsible for identifying observations, conducting analysis and managing the LL process, and the LL Dissemination Section. Due to the fact that the analysis conducted by PAF DTC require multidisciplinary expertise, the peace establishment responsible for Lessons Learned is manned by personnel of various services (Land Forces, Air Forces, Navy). Similarly to JALLC, project teams are often formed in order to increase flexibility in the functional organisation of the Centre.

Summing up, both organisations under study have implemented standing Lessons Learned structures. They combine centralised analytic efforts and decentralised capabilities to make observations. JALLC and the PAF DTC are the key players within Lessons Learned systems in their respective organisations. In regards to organisational design, JALLC and PAF DTC are structured functionally. Nevertheless, their common practice is to establish multidisciplinary project teams. In effect, matrix structures enable them

to increase flexibility and include necessary expertise from various fields. However, JALLC is focused exclusively on analysis and Lessons Learned, while PAF DTC under one umbrella combines Lessons Learned capability, Concept Development and Experimentation (CD&E) and operational standardisation.

Process

The aim of the Lessons Learned process is "to develop a lesson, to include sharing and to utilise it appropriately" (Bi-SCD 80-6 2011, as quoted in NATO LL Handbook 2011, p. 10). Applying the classical model of the organisational knowledge creation developed by Nonaka and Takeuchi (2000, pp. 84-95), learning lessons from organisational experience may be classified as the externalisation of knowledge. Through the Lessons Learned process observations noted by any member of the military organisation (tacit knowledge) are transformed into lessons identified and reports (explicit knowledge). The externalised knowledge becomes the input for remedial actions and the development of military doctrines and manuals (knowledge combination). When organisational behaviours and the rules of actions are changed, the loop of the organisational learning is completed. Vego (2007, pp. XI.43-44) claims that deriving lessons learned is a "complicated and time consuming" activity. He highlights the complexity of the process which should encompass both external determinants and internal tangible and intangible elements of military capability. He stresses the urgency to maintain objectivity, to establish the right scope of study and to analyse all the necessary details. The aim of this section is to compare and contrast two models of the Lessons Learned process (the U.S. Center for Army Lesson Learned approach and the NATO approach). Due to the fact that the Lessons Learned process adopted in the Polish Armed Forces mirrors the NATO model, it will not be discussed separately.

The U.S. model of the Lessons Learned process applied by the Center for Army Lesson Learned (CALL) contains six functions: collecting observations, analysing them, sharing and archiving lessons and best practices, resolving identified problems and assessing the effectiveness of the Lessons Learned programme. The structure of the CALL's model of the Lessons Learned process is presented in Figure 4.

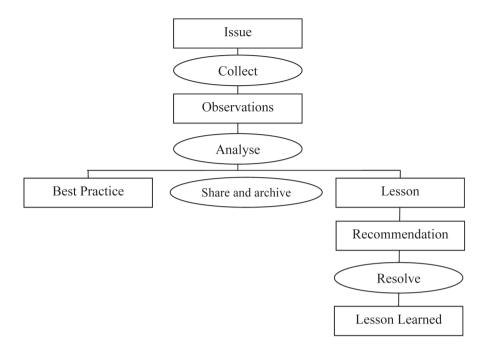


Figure 4. The US Army Lessons Learned process [Source: Establishing a Lessons Learned Program: Observations, Insights and Lessons, Center for Army Lessons Learned, Fort Leavenworth 2011, p. 37].

The NATO Lessons Learned process is structured into the analysis phase and the remedial action phase, and it encompasses the six following steps: gathering observations, analysis, the endorsement of remedial actions and tasking, the implementation and monitoring of remedial actions, the validation of achieved results and the dissemination of lessons learned. The structure of the process is presented in Figure 5.

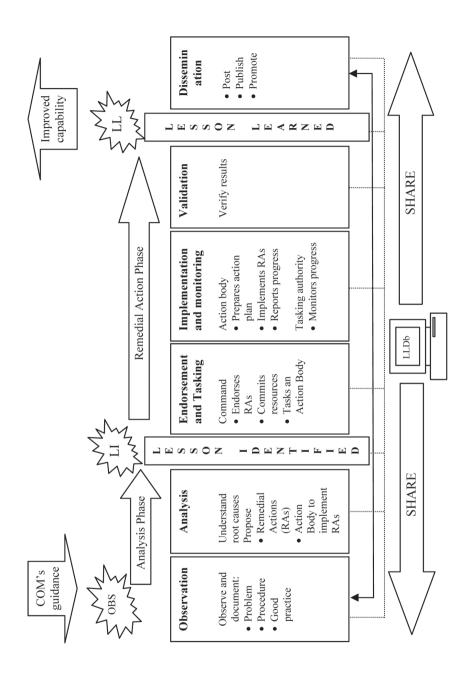


Figure 5. The NATO Lessons Learned process [Source: Bi-SC Directive 80-6 Lessons Learned, 06 July 2011 as cited in: The NATO Lessons Learned Handbook, Joint Analysis and Lessons Learned Centre, Second edition, September 2011, p. 11].

The Lessons Learned process starts with gathering observations. The aim of this stage is to identify: the areas of needed improvement and the gap between the current status and expected outcomes, and best practices recommended to be shared among the members of the NATO community. Observations considered to be basic building blocks of the Lessons Learned process initiate the analysis processes. The NATO model of a LL process is designed in particular for the strategic and operational levels of command. Therefore, it emphasises the role of formal and comprehensive analyses. The JALLC has developed its own procedure of conducting military analyses (the JALLC Project Approach – JPA) which is based on the assumptions of PRINCE-2 methodology (PRojects IN a Controlled Environment). In accordance with JPA, a comprehensive military analysis includes six stages: initiating project, data collection, data analysis, producing a coordinating draft and then a final draft of a analysis report^[9]. A lesson identified is a final product of an analysis phase and an input for remedial actions. The key role within the two initial stages of the process is played by Lessons Learned personnel responsible for making observations and conducting analysis. Within the second stage of the process, the emphasis is shifted to understanding the root causes of an identified problem or a good practice. Moreover, the remedial actions to resolve problems and the action bodies to implement changes are considered. The remedial action phase covers three stages: the endorsement of remedial actions and tasking, the implementation and monitoring of remedial actions, and the validation of achieved results. Within this phase, the initiative is taken by the commander and the action body responsible for managing changes. The commander endorses remedial actions, allocates necessary resources and tasks an action body. Then, the nominated action body develops the plan of remedial actions, implements them and reports progress while the commander monitors implementation. When remedial actions are implemented, their results need to be validated by additional analyses, exercises or experiments. The successful validation means that a lesson identified becomes a lessons learned. In 2011, the NATO Lessons Learned process was revised and updated. Due to the increasing attention given to information sharing, the dissemination stage was added to the preexisting model (cf. NATO LL Handbook 2010, p. 6). Although dissemination is considered and the final stage of the Lessons Learned process, the NATO approach stresses the urgency to share information through the duration of the whole process (Bi-SCD 80-6 2011, as cited in NATO LL Handbook 2011, pp. 11-13; 18-45).

⁹ http://www.jallc.nato.int/activities/jpa.asp (date of access: 09 June 2012).

A comparative analysis of the two models of the Lessons Learned process presented above highlights the similarity between their structures and building blocks. Both of them include four main elements: the identification of observations, analysis, the implementation of improvements and the dissemination of Lessons Learned. In the authors' subjective opinion, the higher level of formality typical of the JALLC approach, observed in particular in the analysis stage, is the key difference between studied models. Therefore, the JALLC approach seems to be more suitable for Lessons Learned capabilities at the strategic and operational level, while CALL's model should be recommended for the operational and tactical level rather.

Tools

Lessons Learned tools include "technology to support collection, storage, staffing and sharing LL information" (Bi-SCD 80-6 2011, as quoted in NATO LL Handbook 2011, p. 10). The Lessons Learned systems applied in military organisations encompass personnel and units at all levels of command and in all kinds of branches and services. In effect, the needs and capabilities of various Lessons Learned stakeholders may be significantly different. Therefore, the armed forces apply the wide range of techniques and tools supporting Lessons Learned procedures combining both standard and their own customised solutions. The Lessons Learned techniques and tools identified in JALLC, CALL and PAF DTC may be classified into four categories: those used to capture observations, to analyse them, to support the implementation and monitoring of remedial actions and to share Lessons Learned. The toolbox applied by the three organisations under the study is presented in Table 1.

Table 1. Lessons Learned techniques and tools

Techniques / Tools	Observation	Analysis	Remedial actions	Dissemination
Observation templates	X			
NATO Observation Collection Program (OCP)	X			
After Action Reports / Post Event Reports	X	X	X	
After Action Reviews	X	X	X	
Post-Operational and Post Exercise Interviews	X	X	X	
Questionnaires	X	X	X	

Techniques / Tools	Observation	Analysis	Remedial actions	Dissemination
Visualisation techniques (i.e. fishbone diagram, affinity diagram, flowcharts, influence diagram)		X		
Analysis techniques (i.e. six Ws, five reasons why, brainstorming, categorisation, statistical analysis).		X	X	
Locally developed spreadsheets and databases			X	
Letters, memos and tasker- tracker system			X	
Communities of interest				X
Publications				X
Request for information service				X
In-processing training				X
Standard IT applications	X	X	X	X
Website knowledge repositories (i.e. wikis, e libraries)				X
LL databases	X	X	X	X

Source: Own study based on the: *The NATO Lessons Learned Handbook*, Joint Analysis and Lessons Learned Centre, Second edition, September 2011, pp. 22-24, 29-32; 36-37; 43-45; *Establishing a Lessons Learned Program: Observations*, Insights and Lessons, Center for Army Lessons Learned, Fort Leavenworth 2011, pp. 17-20, 25-28, 30-31, 63-73.

As already mentioned, the techniques and tools used by JALLC, CALL and PAF DTC to support the Lessons Learned processes include both standard and customised solutions. Nevertheless, in accordance with the objectives of this paper, further analysis will focus exclusively on items typical of military organisations.

The studied organisations highly appreciate the role of the observation identification stage in the Lessons Learned process. In order to involve all the servicemen and make this activity systematic, they have developed or adapted tools supporting the identification of problems and best practices. Some of them such as: observation templates, Post-Operational and Post-Exercise Interviews and After Action Reviews/Reports (AARs) will be discussed in the following paragraphs.

Observation report templates standardise the format of observations in order to enable their further processing and sharing. Moreover, providing a clear structure for documents they facilitate the verbalisation of observations. The template of the NATO observation report consists of five fields: Title, Observation, Discussion, Conclusion, Recommendation (cf. NATO LL Handbook 2011: B1-C5). It is fully compatible with the NATO Lessons Learned Database format. The examples of various observation formats applied across military organisations are provided by the CALL Handbook (2011, pp. 17-19).

Apart from Action Reviews/Reports (AARs) there are other techniques commonly used in the U.S. Army and other military organisations to collect observations, insights and lessons (OILs). Similarly, post-event reporting is highly recognised in the JALLC approach (NATO LL Handbook 2011, p. 19). An After Action Review is "a verbal, professional discussion of a unit's actions that typically occurs immediately after a training event, combat operation, or another mission that determines what should have happened, what actually happened, what worked, what did not work and why, and the key procedures a unit wants to sustain and improve". When a more formal approach is required, a written After Action Review is produced. The aim of such a report is to document "a unit's actions for historical purposes but [it] also provides key observations and LL" (CALL Handbook 2011, p. 63). Action Review techniques are discussed in seminal works on knowledge management and organisational learning (cf. Davenport and Prusak 1998, pp. 8-9; Garvin 2000, pp. 106-116). It seems that the widespread format of After Action Reviews/Reports (CALL Handbook 2011, pp. 64-73) in the U.S. Army may be easily adjusted to the needs of non-military organisations.

Post-Operational and Post-Exercise Interviews conducted by Lessons Learned officers are active techniques of tacit knowledge elicitation. Their aim is to externalise fresh observations and experience gained by Subject Matter Experts (SMEs). For instance, the U.S. Center for Army Lessons Learned conducts the so called "Umbrella Weeks" to interview troops redeployed from operations before they are dispersed (NATO LL Handbook 2011, p. 19). Similarly, the analysis teams of PAF DTC interview the training audience of major exercises in order to establish observations crucial from the perspective of PAF capabilities.

As regards to the techniques and tools for analysing observations and monitoring remedial actions, the majority of them is applied not only by the armed forces but it is commonly used by non-military organisations. However, the NATO DOTMLPF I Capability Categorisation is an interesting example of a technique developed by military organisations. DOTMLPF-I is the acronym denoting the elements of the NATO capability: Doctrine and

Policy, Organisation, Training, Material, Leadership, Personnel, Facilities and Interoperability. It may be used for the comprehensive analysis of an identified problem or for the monitoring of the remedial actions implementation. The analysis of the Lessons Learned capability conducted by Hallet et al. (2009, pp. 41-44) provides the exemplification of the DOTMLPF I categorisation in use.

Information Technology (IT) is widely applied to support the Lessons Learned process. Although not customised to support organisational learning, standard Microsoft Office Software applications (MS Word, MS Excel, MS Access) may be used to collect, store, filter, sort and share information. Their availability for members of the organisation is its main advantage. Moreover, Web-based content manager systems (i.e. MS SharePoint) may be employed to support the Lessons Learned process. For instance, the NATO Lessons Learned Portal is based on the MS SharePoint technology. Nevertheless, these applications lack some specific functions required to support formalised Lessons Learned systems. Therefore, military organisations under study have developed their own solutions customised to particular needs of Lessons Learned communities. There are two examples of such tools worth mentioning. The first of them, the NATO Observation Collection Program (OCP), available to be downloaded from the JALLC website, is "an analysis tool which allows observers to work on a project, as individuals or in teams, noting observations in a systematic and easily-recoverable manner. Additionally, the software allows the observer to input data directly into the NATO Lessons Learned Database without the need to re-format fields or text''[10]. The NATO Lessons Learned Database is a customer-tailored IT tool providing comprehensive support to the LL process. Hallet et al. (2009, p. 43) cite the opinion of the JALLC's commanding officer who highlights two functions of the LL Database: storing and sharing observations and lessons (an archive or a knowledge repository) and supporting the Lessons Learned process as a staffing tool (a tasker tracker enabling the coordination of efforts of all stakeholders involved in learning).

4. Conclusions

The main of the paper has been to study Lessons Learned systems applied by military organisations as the tools of organisational learning and managing organisational knowledge. In order to achieve the above-stated aim some operational objectives had to be attained. First of all, NATO's approach to Knowledge Management has been outlined. Then the major building blocks

¹⁰ http://www.jallc.nato.int/newsmedia/ocp.asp (date of access: 06 June 2012).

and the key success factors of the NATO's Lessons Learned capability have been identified. Finally, the elements of Lessons Learned capabilities in the NATO military structure, the U.S. Army and the Polish Armed Forces have been thoroughly studied. The analysis has encompassed Lessons Learned structures, processes and tools. In effect, the following conclusions can arrived at:

- Information and Knowledge Management is recognised by NATO as one of its priorities, which is mirrored in official policies, directives and strategic documents;
- military organisations highly value learning from experience. Lessons
 Learned constitute one of the building blocks of their knowledge
 management capabilities;
- in accordance with NATO's understanding, learning from experience and implementing continuous improvements are the core elements of the Lessons Learned concept;
- positive attitudes and behaviour of commanders and servicemen seem to be key success factors for a Lessons Learned capability;
- the Lessons Learned capabilities in studied organisations consist of the following components: structures, processes and tools;
- all the organisations under study have implemented standing Lessons Learned structures which combine centralised analytic efforts and decentralised capabilities to capture observations;
- four main stages may be distinguished within Lessons Learned processes in studied organisations: the identification of observations, analyses, the implementation of improvements and the dissemination of Lessons Learned;
- the studied military organisations apply a wide range of Lessons Learned techniques, combining both standard tools and their own customised solutions, in order to meet various requirements of stakeholders at all levels of the military structure and in all kinds of branches and services.

The final objective of the paper is to identify in organisations under study the best practices which can applied beyond a military sector. First of all, the universality of implemented solutions should be mentioned. Observations, insights and lessons identified through the Lessons Learned processes relate to both tangible and intangible elements of organisational capabilities. All the studied organisations make efforts to buy-in all their members for learning from experience and implementing improvements. Total Lessons Learned Management aimed at becoming learning organisations seems to be their long-run aim. Nowadays, the involvement of all ranks from the bottom to the top of the organisational hierarchy is particularly important in the context of

the Positive Organisational Scholarship assumptions. Secondly, the studied cases try to combine leadership and the involvement of their rank and file with some formalised solutions to run the Lessons Learned business smoothly. What is important to emphasize is that the level of formalisation is adjusted to the level in the organisational hierarchy. Similarly, Lessons Learned solutions in the studied military organisations are customised to varied needs and requirements at all the levels of command and in all kinds of branches and services in a national and multinational military environment. This approach should be practised by large corporations, while smaller business entities may benchmark best practices which best fit their situation and expectations. Finally, the Lessons Learned toolboxes used in NATO, the U.S. Army and the Polish Armed Forces include some interesting examples of customised techniques and tools (i.e. AARs, OCP), which can be easily applied in any kind of organisation.

References

- 1. Argyris C., Knowledge for action, Jossey-Bass, San Francisco 1993.
- 2. Allee V., *The knowledge evolution: Expanding organisational intelligence*, Butterworth-Heinemann, Boston 1997.
- 3. Barney J., Firm resources and sustained competitive advantage, "Journal of Management", 1991, Vol. 17, No. 1, 99-120.
- 4. Davenport T.H., Prusak L., Working Knowledge: How Organizations Manage What They Know, Harvard Business School Press, Boston 1998.
- 5. Fiderek W., System wykorzystania doświadczeń w WLąd. "Przegląd Wojsk Lądowych", 2012, No. 2, 39-42.
- 6. Firestone J.M., McElroy M., *Key issues in the New Knowledge Management*, KMCI Press, Amsterdam 2003.
- 7. Garvin D.A., Learning in action: A guide to putting the learning organization to work, Boston 2000.
- 8. Griffin R.W., *Management*, Houghton Mifflin Company, Boston 2008.
- 9. Hallet M., Mota M., Pinot J.H., *Smack M., Soegaard P., Introduction to the NATO Lessons Learned capability*, "The Three Swords Magazine", 2009, Issue No. 16, 38-45.
- 10. Hutson P., *Information and Knowledge Management: Framing the challenge*, "The Three Swords Magazine", 2011, Issue No. 19, 46-49.
- 11. Isler T., *The NATO Lesson Learned process*, "The Three Swords Magazine", 2006, Issue No. 4, 24-26.

- 12. Koźmiński A., Zarządzanie w warunkach niepewności: Podręcznik dla zaawansowanych, PWN, Warszawa 2005.
- 13. Nonaka I, Takeuchi H., Kreowanie wiedzy w organizacji: Jak spółki japońskie dynamizują procesy innowacyjne, Poltext, Warszawa 2000.
- 14. Panek L., *System Lessons Learned w NATO*, "Przegląd Wojsk Lądowych", 2009, nr 2, 23-28.
- 15. Probst G., *Practical Knowledge Management: A model that works*, "*Prism*", 1998, Second Quarter, 17-29.
- 16. Probst G., Raub S., Romhardt K., *Zarządzanie wiedzą w organizacji*, Oficyna Ekonomiczna, Kraków 2002.
- 17. Scheider R., *The After Action Review*, "The Three Swords Magazine", 2011, Issue No. 19, 12-14.
- 18. Senge P., The fifth discipline: The art and practice of the learning organisation, Random House, London, 1999.
- Sewell P., Best Practices: A Lessons Learned enabler for NATO transformation, "The Three Swords Magazine", 2010, Issue No. 17, 18-22.
- 20. Sewell P., Lessons Learned: A bureaucratic burden or a valuable skill set, "The Three Swords Magazine", 2009, Issue No. 16, 35-37.
- 21. Vego M., *Joint Operational Warfare*, US Naval War College, Norfolk 2007.

Military publications

- 1. Allied Joint Doctrine for the Conduct of Operations AJP-3(B), March 2011.
- 2. Bi-Strategic Command IKM Vision and Strategic Concept, 4 December 2007.
- 3. Bi-Strategic Command Information and Knowledge Management (IKM) Directive, 15 September 2008.
- 4. *Bi-Strategic Command Knowledge Development*, Pre-Doctrinal Handbook, Final Draft, 18 Nov 2010.
- 5. Establishing a Lessons Learned Program: Observations, Insights and Lessons, Center for Army Lessons Learned, Fort Leavenworth 2011.
- 6. Instrukcja Systemu Wykorzystania Doświadczeń w Siłach Zbrojnych RP, CDiS SZ, Bydgoszcz 2011.
- 7. NATO Glossary of Communication and Information Systems Terms and Definitions AAP-31A, September 1998.
- 8. NATO Information Management Policy C-M 2007(0118), 11 December 2007.

- 9. NATO Primary Directive on Information Management C-M (2008)0113(INV), 27 November 2008.
- 10. *The NATO Lessons Learned Handbook*, Joint Analysis and Lessons Learned Centre, First edition, October 2010.
- 11. *The NATO Lessons Learned Handbook*, Joint Analysis and Lessons Learned Centre, Second edition, September 2011.

Wioletta Kwak*

PLANNING MARKETING STRATEGIES IN NON-PROFIT ORGANIZATIONS - PRESENTATION OF THE DIRECT RESEARCH RESULTS"

Abstract

The aim of this paper is to present the issues connected with planning marketing strategies by non-profit organizations. The paper presents selected results of direct research conducted in 2009. The survey covered private non-profit organizations (non-government organizations) in three provinces: Malopolska, Podkarpacie and Silesia. The presented results of the research concern the mission and goals of organizations, planning their activities (including marketing activities) and foundations on which marketing strategies are based.

Key words: marketing planning, marketing strategy, non-profit organization, NPO, marketing of non-profit organizations, non-government organizations, social mission, stakeholders

1. Introduction

Non-profit organizations (NPOs) are entities whose driving motive for their activities is not to obtain some profit for their owners but to perform some defined significant social missions. NPOs may take up some profit-bringing activities, but only on condition that this profit is ploughed back into conducting their statutory activities. The non-profit sector covers a wide range of organizations which operate in various fields, such as: health care, social support, human rights, education, culture, sports, professional activation, environmental protection. Non-profit organizations may be public (public non-profit organizations) or private (non-government organizations).

In order to function properly and to realize their missions, non-profit organizations must properly plan their marketing strategies.

mgr, Department of Marketing, Wyższa Szkoła Biznesu – National-Louis University with registered office in Nowy Sacz.

^{**} Scientific paper financed from resources on science in 2008-2010 as a research project.

A marketing strategy is "a system of rules and principles of operating which provides the framework for market operational undertakings" [Pomykalski 2005, p. 131]. According to another definition it is "a system of medium- and long-term principles and guidelines for acting which determine the frames for marketing decisions and activities^[1]" [Leksykon marketingu 1998, p. 238].

This paper presents some selected results of direct quantitative research concerning the role of marketing strategies in creating value for the interest-holders of non-profit organizations. The issue of planning marketing strategies of non-business organizations was presented in this paper along the following lines:

- missions and goals of organizations,
- planning activities in marketing,
- assumptions of marketing strategies.

The research was carried out in 2009 by means of a questionnaire. The subject of our research were non-government organizations operating in the field of social services and social support. Such organizations play a vital role in the society. It can be expected that due to continuing aging of our society and limited possibilities of providing aid by the state, their role will be even more significant in the future. All surveyed organizations had the status of a public benefit organization (PBO). The survey covered 269 organizations from three provinces: Malopolska, Podkarpacie and Silesia. After verifying the questionnaires the answers provided by 253 entities were qualified for further analysis. The remaining questionnaires did not meet the formal requirements.

2. Missions and goals of non-profit organizations

The notion of mission is understood in a number of different ways. Specialist literature provides numerous definitions of this concept. Ph. Kotler, H. Kartajaya and I. Setiawan define the mission as "the company's reason to exist" [Kotler, Kartajaya, Stiawan 2010 p. 59]. On the other hand, A. Stabryła writes that mission is a specific role that an organization performs or intends to perform [Stabryła 2000, p. 48]. Mission should be the foundation of which strategic operational goals are formulated [Lambin 2001, p. 369].

Non-business organizations are "more focused around mission, common goal and common service than business organizations" [Witek-Crabb, p. 133].

The surveyed organizations were asked to quote their mission statements. 11.5% responded that they do not have any formulated mission statements or did not provide an answers to this question. The answers of the remaining organizations were formulated in very different ways.

¹ The definition of strategy by R. Niestrój.

A deep analysis lead to the conclusion that organizations understand the term 'mission' quite differently and some of them - incorrectly. Some organizations identify the mission with their operational goals. Some mission statements were formulated in a very detailed way, while others were too general, for example "providing support". A whopping majority (86%) declaring that they have a mission statement, responded that it is written down in their documentation (statute, rules and regulations, etc). As far as operational goals are concerned, only one organization did not have them specified in their statute, founding act or some other document. In their mission statements, the surveyed entities most frequently described their activities (provided services, ideas popularized by them), subjects to which they direct their actions in order to satisfy needs. References to ethical and religious values appeared in mission statements quite often. 93.8% of surveyed organizations agreed with the statement that their activities are fully consistent with the adopted mission statement (62.7% ticked 'I totally agree', while 31.1% marked 'I agree'). The organizations were also asked about the consistency of their actions with their main goals. 97.4% of the entities declared that their actions were fully consistent with their goals (68.2% answered 'I totally agree', while 29.2% marked 'I agree'). Consistency of actions taken with concrete goals is essential, as non-profit organizations must be totally credible.

3. Plan of action for marketing in a non-profit organization

The execution of the mission and reaching goals requires proper planning including a plan of action for marketing.

Most organizations covered by the survey (61%) planned their marketing (N=246).

Organizations which did not have a plan of action for marketing gave various reasons for this lack. The most frequent reason was a financial deficit of financial, followed by a lack of human resources. They also pointed at the lack of time or expertise or indicated that it was deemed unnecessary due to the small size of the organization. It should be noted, however, that some responses indicated that the idea of planning was not always properly understood. Some organizations gave the following reasons for not planning their marketing operations: they did not conduct any business activities, they were not focused on profit, their profile and type of activities did not require this, their organization was well known within its environment.

The majority of organizations that planned their marketing actions, (nearly 2/3), prepared them in written form (N=141). Marketing plans were not influenced by the province, the size of the city in which the organization

had its registered office, the geographic scope of its activities or the subjective evaluation of the financial standing of the organization^[2].

Non-profit organizations that planned their marketing activities but did not prepare them in writing gave various reasons for doing so; deemed unnecessary as well as a lack of manpower, time or financial means. Some organizations declared that they were in the process of developing written plans or were intending to make them.

Marketing plans were usually prepared by the organizations themselves. Only a few entities used the services of outside units/ entities.

Non-profit organizations should take into consideration various groups of stakeholders in planning their activities. It is essential to identify all stakeholders of an organization, determine their importance and analyze their needs^[3]. Among the stakeholders of NPOs are: service recipients, their families/ friends, donors (individual and institutional), volunteers, employees and members of an organization, media, public institutions, local communities and the society – as a whole.

The subject of the conducted research was also to identify the groups of stakeholders at which activities listed in organizations' marketing plans are directed. The obtained responses have been presented in Table 1.

Surveyed organizations most often directed activities reflected in their marketing plans at individual donors (71.5%), local communities (67.9%), institutional donors (67.2%), public institutions (54%), media (50.4%) and service recipients (48.9%). Further on the list were society as a whole (43.1%), volunteers (40.1%), organizational members (35%), families and friends of service recipients (33.6%) and employees of organizations (9.5%). It may seem surprising that so few non-government organizations address their marketing activities to their employees. However, it should be noted that very many organizations (more than half of those surveyed) did not have any employees.

Table 1. The recipients of activities reflected by non-profit organizations in their marketing plans (N=137).

Group of stakeholders	Percentage of organizations
Individual donors	71.5%
Local communities	67.9%
Institutional donors	67.2%
Public institutions	54%

² The differences are not statistically significant (Kruskal-Wallis test).

³ The stakeholders of an organization are the subject of the strategic analysis. See: K. Oblój, Strategia organizacji. W poszukiwaniu trwałej przewagi konkurencyjnej, PWE, Warszawa 2007, pp. 217-225; M. Lisiński, Metody planowania strategicznego, PWE, 2004, pp. 80-88.

Group of stakeholders	Percentage of organizations
Media	50.4%
Service recipients	48.9%
Society – as a whole	43.1%
Volunteers	40.1%
Members of an organization	35%
Family and friends of service recipients	33.6%
Employees	9.5%
Others	1.5%

Source: own research.

Among organizations that employed staff only 11 (N=68) directed their activities reflected in marketing plans at their employees. On the other hand, 41% associations directed such activities at their members (N=105).

All surveyed organizations were asked to express their opinions about the following statement: "Non-profit organizations do not have to plan their activities (including marketing activities) well ahead of time. It is sufficient to make decisions on a daily basis". 23.3 % of the surveyed organizations (N=248) agreed with this statement (5.2% agreed totally). 67.3% were of an opposite view (18.5% disagreed totally). 9.3% of organizations stated that they neither agreed nor disagreed with the statement. The province, geographic scope of activities and subjective evaluation of their financial standing did not significantly influence the opinions expressed by them^[4].

All organizations were asked for what period of time they plan their activities (including marketing activities – if appropriate). Most organizations (58.4%) planned their activities for a period of time of up to a year. 23.3% of the surveyed entities planned for 2-3 years, while 17.8% for a period of more than three years. Results of the analysis lead to the conclusion that the period of time for which activities are planned is not affected by the province, the size of the city in which an organization has its registered office or its evaluation of its financial status^[5]. However, some relationships between the time horizon of the plans and the geographic scope of the organization's activities were observed ^[6](Table 2).

⁴ The differences are not statistically significant (Kruskal-Wallis test).

⁵ The differences are not statistically significant (Kruskal-Wallis test).

⁶ The Kruskal-Wallis test: Chi-square = 8.061, df=3, Asymptotic significance = 0.045 < 0.05.

Table 2. Period of time for which activities are planned in relation to the geographic scope of the organization's operations (N=194).

Geographic scope of operations	Period of time for which activities (including marketing activities – if they are conducted) are planned – in %			
operations	Up to 1 year	2-3 years	Above 3 years	
Local (N=65)	70.8	16.9	12.3	
Regional (N=57)	52.6	33.3	14.0	
National (N=54)	48.1	22.2	29.6	
International (N=18)	66.7	16.7	16.7	

Source: own research.

4. The foundations of marketing strategies in non-profit organizations

In order to evaluate the foundations of marketing strategies in non-profit organization, the surveyed organizations were asked whether they conduct marketing activities at all. The question was formulated as following: Does the organization conduct marketing activities (aiming at identifying and satisfying the needs and requirements of the service recipients in a place, time and form that are convenient for them, through the marketing-mix formula: product, price, place, promotion). Positive responses were reflected by 25.8% of surveyed organizations (N=244). Nearly 3/4 of the entities admitted that they did not conduct any marketing activities. However, different conclusions can be made from the analysis of responses concerning the issue of planning marketing activities. 61% of surveyed organizations (N=246) declared that they planned marketing activities. The question, however, arises how such discrepancies between responses should be explained. The analysis conducted leads to assumptions that the notion of marketing is understood differently by various non-profit organizations. Their responses concerning marketing activities gave some indication how marketing is understood. This could account for the fact that surveyed entities provided mostly negative answers as their understanding concerning the essence of marketing activities varied differently.

Organizations located in the Podkarpacie Province less often conducted marketing activities than organizations from the Małopolska Province and from Silesia. The differences observed, though, are not statistically significant. The size of the city and the evaluation of the financial standing did not affect, in a statistically significant way, the responses provided^[7]. We noticed, however, a dependence or such a tendency between declarations concerning marketing

⁷ Kruskal-Wallis test.

activities and the geographic scope in which an organization operated^[8]. Taking into account the scope of operations, we must state that marketing activities were mostly conducted by organizations operations.

This research attempted to diagnose the importance held by various groups of stakeholders to non-profit organizations. Respondents were asked to rank particular groups of stakeholders according to their importance to their organization. Stakeholders were to be ranked by being given points from 1 to 10 (1 denoted the most important group of stakeholders, 10 – the least important one). The results obtained thus have been presented in Table 3 (the lower the values, the more important the group of stakeholders was for the organization).

The conducted analysis shows that the three most important groups of stakeholders for non-profit organizations are: service recipients, their family and/or friends and local communities. Further down in the rankings were: donors, society as a whole, volunteers and public institutions. The least significant groups were employees (in case of associations – also members of organizations) and media.

Table 3. The importance of various groups of stakeholders for non-profit organizations (N=162)

Group of stakeholders	Dominant	Median	Average
Service recipients	1	3	4.5
Family and friends of service recipients	2	4	4.9
Local communities	3	3	3.9
Individual donors	5	5	5.1
Public institutions	5	6	5.8
Institutional donors	6	5.5	5.4
Volunteers	6	6	5.7
Society (as a whole)	7	5	5.4
Employees (also members of associations)	10	7	6.5
Media	10	8	7.1

Source: own research.

In order to analyze selected features of strategies used by non-profit organizations, respondents were asked whether their organization focused more on servicing clients or on attracting donors, how frequent its contacts with media were, whether it used diversified sources of finance and whether it was managed on the basis of marketing principles. The questions were based on

⁸ Kruskal-Wallis test: Chi-square = 6.594, df=3, Asymptotic significance = 0.086 < 0.01.

a 1-5 rating system, where a mark of 1 meant more frequently and 5 meant less. Respondents were asked to evaluate them (using a 1-5 scale). Table 4 presents the average marks. It should be noticed that all average marks are more or less in the middle. 30.5% of the surveyed organizations expressed a firm opinion that they focused more on servicing clients than on attracting donors (mark 5). It was the most frequently given mark. 85.5% of the organizations maintained contacts with media. Usually these were not frequent contacts. As far as the diversification of finance sources was concerned, the largest number of organizations (31.9%) answered that they used various sources and were still looking for new ones (a mark of 1). The frequency of contacts with donors varied. Maintaining regular contacts with donors (a mark of 1) was declared by 22.2% of the surveyed organizations. On the other hand, 13.3% of the respondents contacted donors only when it was necessary (a mark of 5). Responses to the question of whether the organization was managed on the basis of marketing principles also varied considerably. 20.5% of the organizations clearly declared that their management was based on marketing principles (a mark of 1), whereas 23.3% of the respondents were of the opposite opinion a (mark of 5).

Table 4. The evaluation of selected activities of non-profit organizations

The organization	Average mark	The organization
"Focuses more on attracting donor than on servicing clients"	3.54	"Focuses more on servicing clients than on attracting donors"
"Maintains frequent contacts with media"	2.9	"Does not maintain contacts with media"
"Uses diversified sources of finance and constantly looks for new ones"	2.49	"Uses one, regular source of finance"
"Maintains regular contacts with donors"	2.67	"Contacts donors only when it is necessary"
"Is managed on the basis of marketing principles"	3.1	"Is not managed on the basis of marketing principles"

Source: own research.

61.5% of the organizations did not conduct marketing research, 16.2% carried them out very rarely, while only 8.5% did so frequently or very frequently.

The reasons given for not conducting marketing research ranged from not seeing the need through lack of financial means to lack of people and time.

The organizations that declared conducting marketing research were asked about the subject of this research. The answers provided by them show that the research concerned mostly service recipients (their needs, preferences, interest in the offer, satisfaction they felt), donors (their number, sources of obtaining

information about the organization, forms of contacts with donors or ways of attracting them), effects and effectiveness of the activity and activities of other organizations.

The responsibility for marketing activities was usually assigned to the board of the organization. Quite often it was the chairman of the organization that was in charge of marketing. Only a few entities had specialists responsible for marketing activities. In some organizations the responsibility for marketing was assigned to other posts (for example to the treasurer, secretary, coordinator of volunteers). A few surveyed entities responded that in their organization there was collective responsibility for marketing activities.

5. Conclusions

Planning marketing strategies in non-profit organizations is a vital condition in effective execution of their missions and accomplishment of their goals. Non-profit organizations understand and formulate their missions in a very different way. Most of the organizations (61%) plan their marketing activities, though these plans are not always written down. The activities reflected in marketing plans are addressed to various groups of recipients, but mostly to service recipients, their families and friends and to local communities. Nearly 1/4 of the organizations do not see the need for long-term planning. A majority of entities (58.4%) plan their activities for a period of up to one year. More than 60% of the organizations do not conduct any marketing research. Marketing activities are usually the responsibility of the board. The results of the conducted research allow to assume that the term "marketing" is understood differently by non-profit organizations.

References

- 1. Kotler Ph., Kartajaya H., Setiawan I., *Marketing 3.0. Dobry produkt? Zadowolony klient? Spełniony człowiek!*, MT Biznes, Warszawa 2010
- 2. Lambin J. J., *Strategiczne zarządzanie marketingowe*, Wydawnictwo Naukowe PWN, Warszawa 2001
- 3. *Leksykon marketingu*, pr. zbior. pod red., J. Altkorna, T. Kramera, PWE, Warszawa 1998
- 4. Lisiński M., Metody planowania strategicznego, PWE, Warszawa 2004
- 5. Obłój K., Strategia organizacji. W poszukiwaniu trwałej przewagi konkurencyjnej, PWE, Warszawa 2007
- 6. Pomykalski A., *Zarządzanie i planowanie marketingowe*, Wydawnictwo Naukowe PWN, Warszawa 2005

- 7. Stabryła A., *Zarządzanie strategiczne w teorii i praktyce firmy*, Wydawnictwo Naukowe PWN, Warszawa-Kraków 2000
- 8. Witek-Crabb A., Specyfika zarządzania strategicznego w organizacjach non-profit, in: Organizacje komercyjne i niekomercyjne wobec wzmożonej konkurencji oraz wzrastających wymagań konsumentów, collective work, edited by A. Nalepka, Wyższa Szkoła Biznesu National-Louis University w Nowym Saczu, Nowy Sacz 2006

Tables in the paper:

- Table 1. The addressees of activities reflected by non-profit organizations in their marketing plans (N=137).
- Table 2. Period of time for which activities are planned in relation to the geographic scope of the organization's operations (N=194).
- Table 3. The importance of various groups of stakeholders for non-profit organizations (N=162)
- Table 4. The evaluation of selected activities of non-profit organizations

Anna Ujwary-Gil* Łuaksz Ross** Agata Kubiś***

INTELLECTUAL CAPITAL STATEMENT OF A COMPANY OPERATING IN A MADE TO MEASURE INDUSTRY

Abstract

This article is a case study of a company operating in the MTM (Made to Measure) industry. The main issue of this manuscript is the evaluation and analysis of a company's intellectual capital in three main areas: human capital, structural and relational capital. The starting point was the analysis of the external environment, its opportunities and threats in relation to the identification of the strategic goals of the company. Against the background of these considerations, key business processes and desired business success of a company that contribute to the achievement of defined strategic objectives were identified. The article used the ICS (Intellectual Capital Statement) method without going into too much detail in defining this method in order to limit the size of the manuscript. For a more detailed description of the ICS method readers should refer to the article [Ujwary-Gil 2012].

Key words: intellectual capital, human capital, structural capital, relational capital, Intellectual Capital Statement, made to measure, case study.

1. Introduction

This article is dedicated to the Intellectual Capital Statement – ICS of a company operating in the MTM (Made to Measure) industry: a firm sewing custom-made suits. In such a company knowledge, experience, customer relationships are extremely important, while the product itself is merely a luxury. Businesses, in particular small and medium-sized enterprises, often

^{*} Ph.D., Associate Professor in Management Department of Nowy Sacz Business School- National-Louis University (WSB-NLU) in Nowy Sacz.

^{**} MA student of WSB-NLU.

^{**} MA student of WSB-NLU.

neglect the management of intellectual capital (IC). This is manifested by a lack of investment in workers' knowledge and in technologies for preserving knowledge, thus indirectly affecting their competitiveness in the market. This enables assessment, reporting and systematic development of the intellectual capital of a company. A thorough analysis of intellectual capital (IC) can lead to identification of areas in need of improvement, linking strategic objectives with elements of intellectual capital. The structure of the Statement of intangible assets is shown in Figure 1 below sets the framework for the analysis of IC.

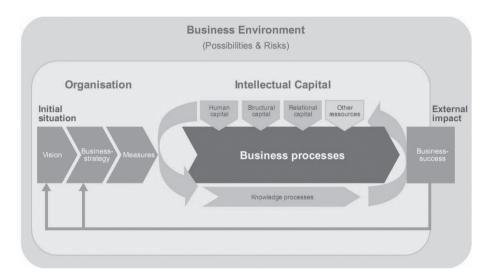


Figure 1 The structural model of Intellectual Capital Statement [Source: InCaS: Intellectual Capital Statement made in Europe. European ICS Guidline, www. incas-europe.eu (8.03.2012)].

The first step in figuring out an Intellectual Capital Statement is to determine the strategy of the company and do an analysis of opportunities and threats in the environment. This constitutes the basis for the assessment of IC. Based on this information, the indicators are calculated for each dimension of intellectual capital. Human capital is defined as a set of competencies, knowledge, social, and personal characteristics or personal employee motivation. Structural capital is the infrastructure, processes and databases that support the human capital of the organization. Relational capital is more difficult to identify, as it consists of relationships with customers, suppliers and partners. IC value is relative to the degree to which it supports the achievement of the strategic objectives of the company. The balance of these elements allows the specification of IC that need to be improved.

2. General information

2.1. System boundaries

In determining the boundaries of the system, the entire company was taken into account (not only its divisions or brunches). The rationale for this decision is the fact that every team in the analyzed company is closely linked and cannot operate as a separate business unit. The most important department in the organization is its headquarters, a plant situated in southern Poland, where not only production is located, but also administration offices and sales department serving customers in its own flagship showroom. The second key unit is the organization's prestigious showroom in Warsaw. This atelier in Warsaw serves as both the commercial and administrative center. The organizational structure of the company may not seem to be very complicated, but after a deeper analysis of the company, it appears that the process of Made to Measure seems to be even more complicated because of the close relationship between these two entities in the company.

2.2. Value creation model

In addition to the final product that the client receives; a tailor-made suit created in the MTM (Made to Measure) system, trousers, jackets or shirts from precious natural materials, the company offers customers a personalized wardrobe managing service. Already in the initial stages of discussions with the client, there is talk concerning the provision of services according to customer tastes and preferences, as well as the common choice of fabrics, accessories and cut. Male buyers receive a package containing additional information relating to current trends and classic dress code. The company offers its customers all kinds of complementary products, such as shoes, belts, ties, bow ties, tuxedo belts, braces, pins and buttons. The complete set constitutes the full range of products and services required to meet the needs of even the most demanding customers. The target customers are men who, where image is concerned, are unwilling to compromise on quality or waste time. The company supplies its products and services primarily to business customers (executives), corporate personnel and the increasingly popular individual client purchasing a suit for festive occasions such as weddings, etc. Due to the fact that it's shelf price is not the lowest, company products and services tend to be sold mainly to wealthier clients. However, the tailoredto-fit market in Poland, while still in its early stages, is adapting to an oligopolistic market and dividing itself into the high-end and mid-price range. The company mentioned has competitive advantages associated with owning

its own sewing workshop and being the only one on the market not using outsourcing. This solution generates lower costs while benefiting from the scale effect, and can therefore offer its customers products at the mid-price level. The company has a very clear system of payment; ie. an advance of 50 per cent after the first measurements and the remaining payment is due upon receipt of product.

In order to provide its customers with the highest quality in products and services, the analyzed company is constantly searching for the best well-known sources of fabrics from countries such as Italy, France, England and Scotland. Here top-quality sheeps wool (merino), camel skins (caramel), Lamia (silver), goat skins (mohair, cashmere), rabbit furs (angora), and Egyptian cottons are available.

2.3. External environment

The business environment of a company operating in the Made to Measure industry carries a lot of opportunities and threats.

Opportunities in the external environment:

- Continuous enrichment of the population, resulting in a growing interest of consumers in luxury products, thus increasing the number of potential customers.
- A growing awareness among both women and men over the past years in Poland of the need for an attractive appearance.
- Increasing demand for quality products and services. This has a positive effect on a company's image as a high-quality part of the philosophy of its operation.
- An increase in number of corporations in Poland an opportunity to gain more corporate clients.
- The sewing industry is on the upswing as it becomes more popular and fashionable. Consumers are increasingly feeling the need to buy apparel tailored specifically for them.
- Access to newer sewing technologies enables a company to increase product quality, reduce costs, and broaden its selection of cuts/patterns on offer.
- Ease of travel within and across border regions an opportunity to gain clients abroad; the company's expansion into the Central and Eastern Europe, as well as to attract new suppliers and foreign partners.
- Positive perceptions of products made in Poland. Increasing the positive image of Polish producers, as companies are producing high quality products. Hence an increasing interest in our native products and the number of potential foreign customers.

Threats in the external environment:

- Increasing competition in the market of suits and custom-made garments. This can lead to more serious problems with getting new customers, and even maitaining loyalty among existing customers. The company will be forced to make greater efforts to gain and maintain market leadership.
- The potential financial crisis. Instability in the financial system of the European Union could lead to unrest among consumers and manifest itself through customers resigning from the purchase of luxury items or at least limiting or delaying purchases.
- Reluctance in exposing their financial position.
- Rising transport costs mainly related to increasing oil prices; a fact reflected as part of costs incurred by a company.
- Lack of skilled workers in the sewing industry. It is one of the main problems that has plagued the industry textile for many years.
- No alternative means of sewing.
- Rising customer requirements (timewise) is a big challenge for the company. It is difficult to reconcile the increasingly shorter lead times with maintaining high quality suits.

2.4. Strategic objectives

The company set clear goals for itself in order to successfully develop and create a coherent development path. The main direction of the company's development is one to improve its visibility in the market as a luxury brand market leader in MTM suits. Therefore, it focuses on making changes in the company's marketing strategies and Public Relations. The firm represents the highest quality products at the right price. What enables the company to maintain the loyalty of existing customers while attracting new ones is its strong luxury brand image. As a result, in order to achieve its marketing goals, the company decided to employ an external agency to intensify its market presence. Secondly, but not less importantly, are continuous improvements including training of employees, so that they, too, represent a level suitable for a luxury brand.

Short turnover times allow the company to maintain a competitive advantage in the market. The company's production of suits takes place within Poland, which allows them to reduce customer waiting time for the product compared with competing plants, often having their plant abroad. A very important advantage is also its individual approach to the customer - the company focuses on building long-term relationships, encouraging men to re-use its services.

One of the goals of reaching beyond the normal course of business is to educate the public. The business owner from the very beginning has been

trying to improve the public's awareness of good style and the dress code for real gentlemen. Professional advice in choosing the right suit and accessories for the appropriate occasions is just a matter of possessing an experienced and trained staff.

The creation of a complete customer base has a very significant impact on the functioning of the company. It is a necessary tool in the effort to meet other business goals. In order to build a lasting relationship with the client and keep his loyalty, it is necessary to maintain complete records of clients future and past orders.

The second objective of the stakeholders in the company might be to attract two or three complementary partners. Collaboration with manufacturers of custom-made shoes and women's clothing, or with a professional laundry would allow the company to better meet customer needs and give him a stronger attachment to the company.

The objective of expanding their market share is closely associated with changes in the employers' market in Poland. Definitely a growing number of foreign corporations, and with them, the number of managers representing the level of those in Western Europe, is turning attentions to the professional look. As a result, the company has set itself the goal of a sales growth figure in the corporate customer market of 20% of all products sold over a period of 2 years.

The company has set itself the goal of establishing appropriate procedures concerning the treatment of clients after having received the final product. This would allow the company to maintain a positive continuous relationship with the customer. At the same time feedback directly from the consumer gives indications of a very clearly define direction in further developments for the company.

Investment also requires a computer system that would facilitate the flow of information between employees, and enable the creation of the aforementioned complete customer base.

3. Intellectual capital - definitions and status quo

3.1. Definitions of components

3.1.1. Business processes

The study identified five key company business processes listed in the table below.

Table 1 Business processes elements and definitions

ses	BP-1	Sewing	identifying customer needs, taking measurements, conveying the data to sewing room, sewing, fitting, delivery of suit
Business Processes	BP-2	The process of gaining new clients	set the target customer, choosing methods to reach customers, building a database of potential customers, customer contact
	BP-3	After sales service	contact with the customer, analyzing feedback, identifying customer needs
	BP-4	Creating a brand	identifying a brand strategy, choosing appropriate promotional tools
	BP-5	The acquisition of knowledge	market research, acquisition of information, training, monitoring changes in the industry

Source: own elaboration.

The sewing process is one of the most important of these mentioned. This process begins with the first contact with a client who decides to buy a suit. A Customer Advisor has an interview with the client to identify his requirements. The client and the advisor must agree on the type of suit, the fabric used, as well as accessories. This is followed by taking the customer's measurements and sending the required information to the sewing room and then sewing the suit. The sewing process requires the client to try the suit on for size and then doing any alterations necessary. The customer is informed about the possibility of fitting and a date is set. Once the suit has been fitted it is sent to the sewing room for alterations. Fitting may be repeated several times. Finally the customer receives his custom-tailored suit.

The process of gaining new customers is important as the company continues to grow. The process begins by identifying the target customer, which determines the appropriate methods for reaching potential clients. The next step is to build a database of target customers for future marketing purposes. In the end, contact is made with the customer and relationships are build.

After sales service may be initiated by the customer himself in the form of a complaint, a desire for further services or by the company in the form of feedback to ascertain customer satisfaction. This process begins with client contact and an analysis of his needs by gathering the necessary information, and then considering the needs of the client in terms of service.

The process of developing a brand is long and requires consistency in marketing. It begins with the appointment of a brand strategy determined by choice of target customer and use of proper marketing techniques.

The process of acquiring market knowledge begins with recognizing the need to develop. The company carries out a market study in order to obtain relevant information on trends, and recognizes the need to improve their employees' skills. The next step is to in fact obtain all relevant information; ie, to identify an appropriate company or a specialist in a particular field to train employees. In the end, training is conducted internally or externally. The last step in the process is to track changes in the industry in order to identify further opportunities for development.

3.1.2. Business success

The company's business success was determined by five factors, which are as follows.

Table 2. Business success in the company

	BS-1	Image	perception of the company as a luxury brand	
Success	BS-2	Customer loyalty	a repeat customer, building long-term cooperation with the customer	
BS-3 Profess		Professional staff	professionally trained staff knowledgeable of market trends and loyal to the company for serving the customer better	
B	BS-4	Aware of the client	client of analyzed company knows the rules of good style and current trends	
	BS-5	Market Leader	highest percentage of MTM market in Central and Eastern Europe	

Source: own elaboration.

The company offers a luxury product. For this reason, maintaining a positive image of the brand is vital to achieving business success. An image of the company's brand as prestigious and luxurious enables it to reach the target customer - business, corporate or individual.

Another ingredient to success in business is customer loyalty. The company's goal is to provide the customer with an exceptional buying experience. Providing high quality products and services that the customer will wants to purchase over and over ensures the building of long-term relationships with customers. An added goal is to work with its customers to develop the so-called client's closet of costumes and accessories.

Professionalism of the staff is also essential in achieving business success. Personnel having direct contact with the customer in particular should possess appropriate service skills. A professional staff for the company means employees who are familiar with current trends in the market and do their best to ensure customer satisfaction. The workers try to meet the expectations of customers, and are friendly, professional, committed and have the appropriate

skills. The employees have a professional degree and the ability to speak at least one foreign language. The company employees also include persons employed in the sewing plant, where high skills and level of ability influence the quality of the product.

The company has also set itself the goal of raising customers' awareness of how to care for different types of suits, and thus ensure longevity for their garments. The company strives to ensure that customers are aware of the principles of good style as well as trends in this type of clothing they wear. One of the major factors in the success of a business is to be the market leader in MTM industry in Central and Eastern Europe.

3.1.3. Human Capital

As is well known, people play an enormous role in any organization. It makes no sense to examine the different traits of human capital individually. It is all these traits joined together that form a person fit to work in a company. Therefore, the boundaries between them are often blurred.

Table 3. Human capital

_	HC-1	Experience	direct contact with the client, working in the luxury sales department	
Capital	HC-2	Education	specialist courses: sewing, customer service, product knowledge, trends, etc.	
Human	HC-3	Skills	Knowledge of foreign languages, operating machinery (including computer)	
H	HC-4	Personality	easily establishes relationships, well-mannered, motivated, disciplined.	

Source: own elaboration.

The experience of employees is of paramount importance particularly for workers in direct contact with the customer. It is important that employees have the skills to communicate effectively with a business customer, and that they comply with the rules the company wants to learn. Earlier work experience in the luxury goods industry is helpful in providing professional service as this market has its own specificities compared with markets for other goods.

Given the emphasis the company places on the quality of its products, very important is the education possessed by its specialist tailors, on whom, most of all, quality depends. As for consultants, orientation of current trends in the market, but most of all, knowledge of the universal principles of the classic male wardrobe are the most important.

To be included in required skills for company consultants is a knowledge of foreign languages, as part of the company's customers are clients from abroad. Computer skills can also have great meaning as this allows for a faster flow of information and, therefore, quicker service and the ability to find the necessary information about the customer.

Personality in this industry is of great importance. Employees should present the highest level of personal culture. They should be composed, committed, and professional to a maximum. Of course, as is always the case with customer service, the ability to establish relationships is vital.

3.1.4. Structural Capital

One of the components of intellectual capital of the company is structured capital, without which the overall intellectual capital is not able to fully realize its potential. Efficient systems and procedures included in the structural capital affect other companies' intellectual ability.

 Table 4 Structural capital

tal	SC-1	Customer database	database contains detailed information about customers and their orders
al Capital	SC-2	Procedures	standardization of customer services, production and ordering procedures
Structura	SC-3	Internal computer system	fully integrated computer system allowing easy access to information
Str	SC-4	Training	System of training allows systematic broadening of knowledge and skills of workers (tailors, managers)

Source: own elaboration.

In an analysis of the company four factors of structural capital have been highlighted. The first factor is the customer database, which contains detailed information about customers and their previous orders. It includes information about all the firm's customers. Each person is added to the database after making an order. The database holds information such as preferences, tastes and special requirements of customers. This tool greatly facilitates a better understanding of customer data for making predictions about future purchases.

The second factor is the procedures that are designed to standardize processes, customer service, production and ordering. All processes should be consistent and clear and understandable procedures for all employees. This is to make certain standards and maintenance processes are at a high level. This also serves to reduce the amount of errors, delays and confusion.

Another factor of structural capital is the internal computer system. It is an integrated platform that enables all employees easy access to necessary information including the customer database. Depending on the position held in the company, individual employees have access to relevant information (updated in real time) in the system. It contains data such as the current status of standing orders for each customer (for informing customers of any delay or accelerate processing the order), financial data, contacts for employees and suppliers, or info about the status of a placed order from suppliers.

The last factor is a training system that allows the systematic broadening of knowledge and skills of workers (tailors, managers). The system contains information about each employee and the training that took place. The system has also a schedule for future training highlighting positions and full names of the employees. All specialized courses, workshops and training courses are planned in advance. These include, among others, language courses at different levels, workshops and conferences tracking the latest trends in fashion, sewing courses and training in customer service.

3.1.5. Relational (Customer) Capital

In the description of the company the three factors of relational capital have been highlighted. The first factor is the customers themselves, who are wealthy people from the business world, corporations as well as individual customers who occasionally buy a suit. The company's customers are often aware of their needs and have very high expectations. This element is not only associated with the fact that they are purchasing a high priced item, but concerns the prestige of purchasing something custom-sewed. Another factor is the supplier. This is a key factor, because suppliers are directly related to the quality of products. The company uses house fabrics, offering top quality wool, cotton and sewing accessories. Fabrics are imported from countries such as Italy, France and Scotland, as these countries have a long history of tailoring giving them an advantage. Suppliers are also specialized companies servicing the technical side of the work including: sewing machines etc.. The last factor is the partners of complementary goods. The company has worked very tightly for a long time, unwilling to cooperate with partners, focusing on their core business - tailor made suits. Over time, it was noted that the market requires the company to expand its range including, for example, sewing custom fit shoes. Thus new partners were sought to complement the company's product selection and vice versa. In this manner a truly complementary customer service was introduced to completes customers' wardrobes. In addition, laundries that provided appropriate dry-cleaning services for suits were brought on board. This in turn can be added to the list of after-sales services.

Table 5. Relational capital

Capital	RC-1	Customers	wealthy customers from the business world, corporations, individual customers (occasional)
	RC-2	Suppliers	house fabrics from Italy, France and Scotland offering the highest quality fabrics
Relational	RC-3	Partners of complementary goods	firms sewing custom-fit shoes, women's clothing, laundries

Source: own elaboration

3.2. QQS assessment (quantity, quality and systematic management of intellectual capital)

3.2.1. Business processes

The top-ranked factor in terms of volume of business transactions is the after-sales service (95%). It's worth, on the other hand, remembering that not every sale or service finishes when the customer receives the product. Quantity does not go hand in hand with quality and regularity, which is assessed to be at the level of 30%. The main reason for this low assessment is lack of follow-up at the hands of the company and a poorly developed customer database (Fig 1):

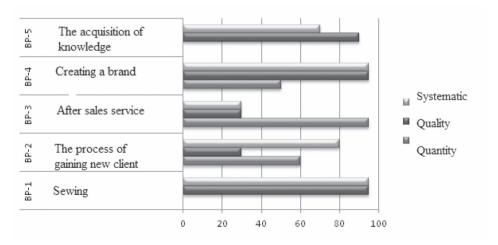


Figure 1. QQS of Business Processes (Source: own elaboration).

Another factor is the acquisition of new customers, which sits at 60%. The level of regularity is satisfactory as it stands at 80%. As with after-sales service, the quality of customer acquisition leaves a lot to be desired; the cause of which

may be their weak base of potential customers and the lack of sales skills of the customer service team.

Another factor is the creation of brand. Here the numbers sit at the 50% level. This low rating is the reason for the need to focus more on producing high quality products.

3.2.2. Business Success

A top-ranked factor determining the success of a company is its image as a luxury brand, which offers products of the highest quality (Fig 2). Both in terms of regularity, quality and quantity, this factor has been assessed at 95%. This means that the company is constantly and consistently implementing its strategy well, something that should be continued.

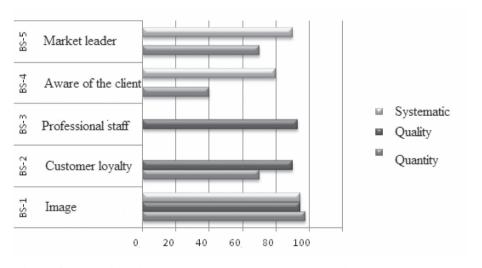


Figure 2 QQS of Business Success (Source: own elaboration).

A factor of very great importance for the success of the business is possessing a team of the highest quality. As is well known, professional tailors guarantee the high quality of products, while the company representatives have direct contact with the customer and influence his decisions. It is difficult to assess the professionalism of the people because of the level of regularity in performing their duties, but when it comes to the quality of staff, the figure was set at a level above 90%, which is a fully satisfactory level.

Another important factor for success is customer loyalty. It was not possible to assess in terms of the regularity of management, but the quality was assessed at 90%, and quantity at 70%. It follows from this that customer loyalty is at a satisfactory level.

Another strategic goal of the company is to maintain its position as a market leader. This factor was regularly found to be 90%, while quantity at 70%. This means that the company consciously, continuously, consistently implemented its strategy and was well directed; a trend that should continue.

The last selected factor is awareness of the customer. For its strategic goal the company chose to educate the general public as to the rules of classical men's clothing. This goal was met in terms of regularity at 80%, while quantity at 40%. It follows that company representatives were very effective in assisting clients, but at the same time less than half of men coming to shop know these rules. Here the room for improvement is considerable, although public education in the field of fashion and clothing will not be easy.

3.2.3. Human Capital

The top-ranked factor among the factors of human capital, is the level of experience of employees (a rating of over 90%). Almost all employees in the company have extensive experience in selling luxury products and direct contact selling with customers (Fig 3).

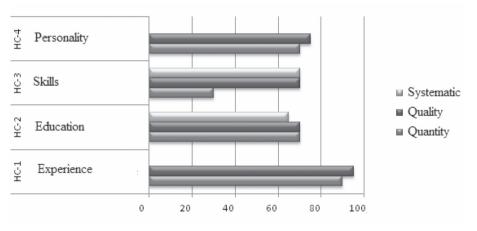


Figure 3. QQS of Human Capital (Source: own elaboration).

Most of the factors were assessed as generally adequate (a score of over 60%). Both employees expertise relating to the tailoring industry, as well as the personality of employees needed for high quality customer service (personal culture, communication), are at a relatively high level, but still can be improved. The only low-ranked factor (in terms of quantity) are skills. Capabilities in the field of foreign language skills and usage of machines require significant improvement.

3.2.4. Structural Capital

The highest-ranked factor of structural capital is the internal computer system (88%). Possibilities for improvement sit at about 12%. The database is lacking in terms of a comprehensive background of orders with the exact dates of purchase, frequency of purchases and amounts issued. Employees of the company may at any time seek information in the customer base using the user-friendly system. Another factor to be evaluated are the procedures with an averaged result (quantity, quality, regularity) ranking at 85%. This means that the procedures are qualitatively correct and clearly defined. Employees use them regularly. The opportunity to improve is at 15%. Significantly lower was the rating for the customer database. The database has not been uniformly updated since the inception of the company, so the amount of information is estimated at 10%. The quality of the database occupies the 55% level, which is not a good end result, taking into account the importance of the database when acquiring new customers.

The last factor is the training system, the average was 37%; the opportunity to improve, 63%. All quantitative performance criteria, qualitative and systematic shows that the company rarely and very poorly trained their staff.

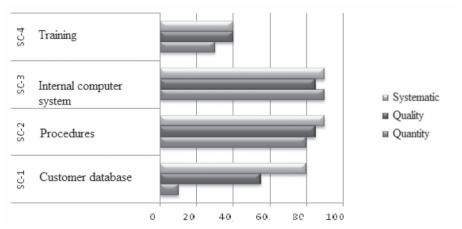


Figure 4. QQS of Structural Capital (Source: own elaboration).

3.2.5. Relational Capital

Relational capital (Fig 5) fared the worst in terms of assessment where partners of complementary goods were concerned. This is due to the relatively short life of the company. The Company continues to develop its business and is looking for opportunities to work with various suppliers of accessories for suits.

For this reason, it was assessed that the company has reached 20% of the target number of suppliers of complementary goods. In the case of the regularity and quality the situation is satisfactory (65%). Products from suppliers of complementary goods are of high quality, but the company anticipates that in the future exclusive products will also be made available. Systematic evaluation of complementary goods partners in relation to pursued goals ranks at 65%. In order to best serve the customer the company must shorten delivery times and have better insight into quantities of supplied accessories, as well as improve relationships with suppliers of complementary goods.

The evaluation of suppliers for the company is very positive. The rating of quantity of goods delivered in relation to the objectives of the company went as high as 90%. Product quality and the quality of cooperation with suppliers was rated very high. From the beginning the company paid much attention to its image by carefully selecting subcontractors and suppliers to ensure the best quality products. Therefore regularity was absolutely at a sufficient level (95%). There is continuous cooperation with suppliers from Italy, Scotland, etc., in arranging for the best quality fabrics in colors consistent with the trends and deliveries

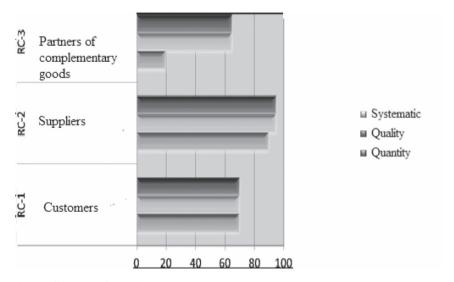


Figure 5. QQSof Relational Capital (Source: own elaboration).

The assessment of customers is satisfactory, all positions are assessed at a level of 70%. Taking into account quantities, the goal of the company is to be the market leader in Central and Eastern Europe, from where in the future it is anticipated that the majority of customers will originate. Today, the company takes orders from abroad, but it is not enough to be a leader. The assessment

of quality where customers are concerned has to be explained by the fact that the company still does not support corporate clients. Regularity has also been evaluated to be sufficient for the simple reason that one of the goals of the company is to improve customer awareness and develop a database that will facilitate better contact with the customer.

4. Intellectual capital development

4.1. Strengths and weaknesses (improvement possible)

After evaluation of intangible assets QQS, the greatest opportunities for improvement noted are in the structural capital of the company. The average assessment was set at 65%, which means the possibility of improving is up to 35%.

Table 4 Strengths and weaknesses of the analyzed factors

	Quantity (%)	Quality (%)	Regularity (%)	Average assessment (%)	Possibilities for improvement (%)
Business Processes	68.33	68.00	74.00	70.11	29.89
Business Success	69.50	92.67	88.33	83.50	16.50
Human Capital	65.00	77.50	67.50	70.00	30.00
Structural Capital	52.50	66.25	75.00	64.58	35.42
Relational Capital	60.00	76.67	76.67	71.11	28.89
Total	63.07	76.22	76.30	71.86	28.14

Source: own elaboration.

Human capital and relational capital have been estimated at almost the same level (on average 70% and 71%), giving the opportunity to improve a rating of 30% and 29%. Business processes followed at 70%, which means that the possibility for improvement is 30%. Definitely Business Success was assessed the highest with an average of 83.5%. The possibility for improving this element is 16.5%. In summary it can be stated that structural capital has the greatest potential for improvement.

Review summary of QQS

Among the Business Process assessed by far the best was the sewing process with an average rating of 95% (for improvement - 5%). The next is the process of creating a brand and the process of acquiring knowledge, estimated at 80% (20% for improvement). The average value of ratings for gaining new customers is 57% (42% for improvement). The lowest-ranked process is the after-sales service.

Another group of factors for a company is business success. In this group, the highest assessment was for image of the company, 96% (for improvement of 4%). Also professionalism of the staff was evaluated at 93% (for improvement - 7%). Other factors to be assessed were both customer loyalty and market leadership, assessed at 80% (20% for improvement). Of these, the lowest-ranked element was customer awareness, 60% (40% for improvement).

In the Human Capital Group rated the highest was experience, 93% (for improvement of 8%). Personality was rated at 73% (for improvement 28%). Education was rated much worse, 68% (32% for improvement). Skills fared the worst in this group, 57% (43% for improvement)

In Structured Capital the internal computer system was rated the best, 88% (12% for improvement). Company procedures also got high scores, 85% (15% for improvement). A significantly lower rating went to customer database, 48% (52% for improvement), while the training system received the lowest average score, 37% (63% for improvement).

The final group is relational capital, where suppliers were assessed the highest, 93% (7% for improvement), while the customer received an evaluation of 70% (30% for improvement). The worst in this group were partners, 50% (50% for improvement).

4.2. Weights of intellectual capital and fields of intervention

The weight of structural, relational and human capital had a very similar effects on the business results of the company. The experience, education and knowledge possessed by the company employees has a large impact on the success of the business. Other factors are the customer database, relationships with customers and quality of suppliers. The least important factors contributing to the success of the business are: personalities of staff and relationships with partners (Fig 6).

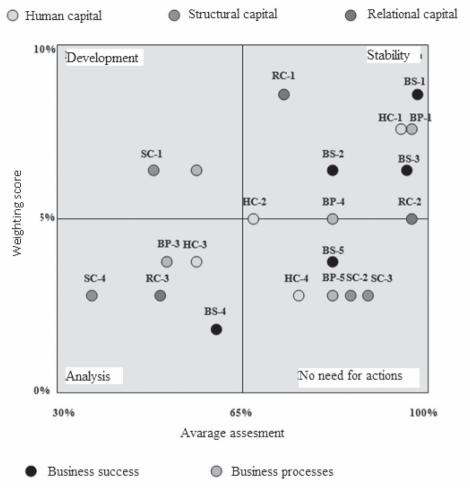


Figure 6. Fields of intervention (Source: own elaboration).

Legend:

BP-1	Sewing
BP-2	The process of gaining new client
BP-3	After sales service
BP-4	Creating a brand
BP-5	The acquisition of knowledge
BS-1	Image
BS-2	Customer loyalty

BS-3	Professional staff
BS-4	Aware of the client
BS-5	Market Leader
HC-1	Experience
HC-2	Education
HC-3	Skills
HC-4	Personality
SC-1	Customer database
SC-2	Procedures
SC-3	Internal computer system
SC-4	Training
RC-1	Customers
RC-2	Suppliers
RC-3	Partners of complemen tary goods

The square of development makes up the most important factors that have a relatively high potential for improvement. The matrix was a good base for customer data. They are important because they allow you to attract new clients and enabling expansion of markets. At the same time possessing the complete purchasing background of customers is extremely helpful in maintaining positive relationships with those who have already benefited from the services of the company. In this square there is also a point BP-2, which represents the process of acquiring new customers. The company in their efforts to become the market leader in Central and Eastern Europe should improve the process of reaching out to potential customers.

Within the square of stability there are very important elements and well rated - with little prospect of improvement. In this zone, the matrix included relationships with clients - key to business productivity and decisive for its success. Maintaining these relationships is possible through an experienced staff, which also found itself within the frame of stability. This means that the previous position of the company was based mainly on these two factors. The company should continue its strategy in these two areas.

On the borders between stability and the area in which operations are not necessary, are education, workers' knowledge and supplier relations. These are factors of average importance and therefore require no special improvements. However, they must not be forgotten completely and must be included in the company's strategy.

The area of operations, encompassing employee personalities, procedures, and internal computer system is not in need of improvement. These are elements

of very little importance and whose potential for improvement is low. They are not strategic to the success of the company. The square of analysis encompasses these factors, where the potential for improvement is large, but they will not significantly improve the company's strategic objectives. The matrix here included workers' skills, system of training, and the relationship with partners. This area also includes the process of acquiring knowledge BP-5.

5. Conclusions

As a result of the analysis of intangible assets, it was noted that the company is in a stable situation. The number of factors requiring further development are few. Most of the factors are as evenly set as in the three other parts of the matrix, making it impossible to clearly identify the position of the company. Many factors find themselves within the square of stability, which means they have a major impact on the company's business objectives, but do not require improvement. The company should focus on attracting new customers, which could help their underdeveloped customer database. The subjectivity of the ratings of the analyzed factors should be taken into consideration as this could distort the results of the matrix.

References

- 1. *InCaS: Intellectual Capital Statement made in Europe*. European ICS Guidline, www.incas-europe.eu
- 2. Ujwary-Gil A., Intellectual Capital Satatement (ICS) as a method of Measurement and Management of Knowledge Assets, ECKM, Spain 2012, p. 1211-1222.

Appendix: Indicators

	ID	IC Factor	Indicator	Definition	Unit	Actual value	Planned value
	BP-1	The sewing process	Time required to sew a suit	Number of weeks required to sew a suit	Т	4	3
જ	BP-2	Acquiring new customers	Number of new customers	Number of new per month customers	#	10	30
Business Processes	BP-3	After-sales service	Frequency of follow-up contact with customers	Follow-up contact with customers after sale of products	#	50	100
Busi	BP-4	The process of branding	Number of marketing campaigns	Number of promotional campaigns annually	#	2	5
	BP-5	The process of acquiring knowledge	Number of training sessions	Total number of training sessions annually	#	2	5
	BS-1	Image					
	BS-2	Customer Loyalty	Number of repeat shoppers	The percentage of customers returning to the company for further purchases	%	70%	85%
Business Success	BS-3	Professional staff	Percentage of employees with higher education	The percentage of employees who have completed a university degree, specialization or have extensive experience in the industry	%	40%	70%
	BS-4	Client	Percentage of clients clearly defining their needs	The percentage of customers familiar with the principles of good style	%	70%	90%
	BS-5	Market Leader	Market share	Percentage of market share in Central and Eastern Europe	%	30%	40%

	ID	IC Factor	Indicator	Definition	Unit	Actual value	Planned value
	HC-1	Experience	Number of employees with extensive experience	Number of staff, with extensive experience in the company	#	10	25
pital	HC-2	Education (Knowledge)	Number of employees with specialized education	The number of employees who having appropriate training	#	15	20
Human capital	HC-3	Skills	Number of employees with knowledge of foreign languages	Employees pssessing additional skills	#	5	10
	HC-4	Personality	Percentage of employees possessing distinctive customer relationship skills	Employees with higher monthly sales figures demonstrating the proper approach to customers	%	30%	60%
	SC-1	Customer database	Quality of customer database	Amount of information in the database	#	500	750
ital	SC-2	Procedures	Number of procedures	Number of procedures within the company	#	10	8
Structural Capital	SC-3	internal computer system	Number of support systems	Number of systems that support the exchange of information between the company and the sewing room	#	5	3
	SC-4	System of training	Number of training sessions	Total number of training sessions annually	#	1	5
lal I	RC-1	Client	Number of clients	Total number of clients monthly	#	15	30
Relational Capital	RC-2	Supplier	Number of suppliers	Number of suppliers providing materials	#	5	5

	ID	IC Factor	Indicator	Definition	Unit	Actual value	Planned value
Relational Capital	RC-3	Partners	Number of Partners	Number of partners providing complementary goods	#	3	5

Diana Stolarska*

METHODOLOGICAL ASPECTS OF INTRA-ORGANIZATIONAL TRUST MANAGEMENT

Abstract

Trust management in a company is a relatively new concept in management studies, yet it is attracting increasing attention. So far, interest in trust in the context of commercial organizations has focused mainly on its importance in the relations with external stakeholders in the company, especially customers and shareholders. However, still new empirical evidence and theoretical reasons suggest that building a relationship based on trust within the organization is equally important to the greater efficiency of the companies, their innovation, flexibility and resilience to crises. The article presents the essence of the concept of trust in the context of relations within the organization and its importance for the company's success and development. Furthermore, it discusses the building process (evolution) of trust. The aim of the article is to identify possible methods and tools for building trust within the organization. This has been achieved through the analysis of specialist literature, as well as collection and systematization of the proposed means of building intra-organizational trust.

Key words: trust, trust management, intra-organizational trust, methods of building trust in organizations

1. Introduction

In most recently published books on economics, finances, or organization and management, one can read about phenomena which have drastically changed economic reality, conditions and requirements for conducting business activity. Globalization, internalization of

business, informational and IT revolution connected to the development and distribution of new technologies, chiefly the Internet, resulted in, among

^{*} MA, PhD student, full-time Doctoral Studies, Cracow University of Economics.

other things, increased awareness and quality in managing business and human resources, increased competition, increased requirements of the customers and stakeholders, depletion of existing sources of gaining competitive advantage as well as means of improving efficiency and increasing profits. In consequence, both theoreticians and practitioners of management turned towards company's intangible assets, such as reputation, expertise, organizational culture, or finally trust, all significant due to the fact that in large measure they determine the utilization of the company's remaining material resources and they also possess the ability of creating values.

Trust is a phenomenon which is considered to be a factor facilitating efficient cooperation, or even to be its prerequisite. Moreover, the role of trust gains gravity along with the increasing ambient uncertainty, complexity and variability, that have dominated in the recent decades the image of the modern world, including the business world. Trust in the context of organization may be viewed in two ways, as perceived within a single organization (intra-organizational trust, internal) and between organizations, or between organizations and third parties (inter-organizational, external) [Grudzewski et al., 2009].

2. The essence of intra-organizational trust

Intra-organizational trust occurs within an organization (e.g. trust between co-workers, teams, trust between the employees and the leader). As W.M. Grudzewski et al. [Grudzewski et al., 2009] rightfully notice, trust is a phenomenon easily and intuitively recognized by people, though clarification of its meaning is a difficult matter. There is no one, widely accepted definition of trust, thus it is crucial for explanation of its essence to quote a couple of them, widely popularized in literature:

- F. Fukuyama [1995]: "Trust is the expectation that arises within a community of regular, honest, and cooperative behaviour, based on commonly shared norms, on the part of other members of that community."
- N. Lin [2001]: "Trust is confidence or expectation that an alter will take ego's interests into account in exchanges."
- N. Luhmann [1979]: "To show trust is to anticipate the future. It is to behave as though the future were certain."
- A. Seligman [1997]: "Trust is a some sort of belief in the goodwill of the other, given the opaqueness of other's intentions and calculations."
- P. Sztompka [2007]: "Trust is a bet about the future contingent actions of others (...) it is connected to commitment through action."

 A. Zaheer, B. McEvily, V. Perrone [1998]: Trust is "an expectation that an actor can be relied on to fulfil obligations, will behave in a predictable manner, and will act and negotiate fairly when the possibility for opportunism is present."

All of the abovementioned definitions indicate, in fact, similar understanding of the concept of trust, namely that trust is a belief in the goodwill of the trust recipients, theirs future credibility or consideration for the interests of the person who places trust in them. However, many authors point out that one can only speak about trust on condition that the decisions and actions taken by the trusting person rely on this conviction.

Another important issue is the fact that trust has to be based on a prior assessment of the partner's credibility (with available basis for assessment). Whereas when trust is not supported by this assessment, or when the partner is trusted in spite of all the information or evidence pointing to his or her unreliability - this is so called blind trust, which is erroneously confused with trust.

3. The role of trust in organizations

Researchers who focus on the phenomenon of trust [Fukuyama 1997, Coleman 1988, Knack and Keefer 1997] unanimously declare that trust on the macroeconomic level contributes to the competitiveness of economies. P.J. Zack and S. Knack [2001] claim, on the basis of economic data analysis concerning 41 market economies and their levels of trust (according to the research conducted by the World Values Survey), that the increase of trust by 10% increases the annual rate of GDP per capita income by about 0.5%. K. Arrow, Nobel laureate in Economic Sciences, states that trust (as well as other values such as truthfulness and loyalty) has measurable, economic value because it increases the effectiveness of the system and contributes to the increase in global production [Arrow, 1974].

Another, equally significant, role of trust is observed on the level of single companies. In recent years, a number of hypotheses were presented concerning the significance of trust in organization's performance and success, as well as a number of empirical evidence for proving it at least partially, was provided. The basic functions of the role that trust plays within an organization are presented in the following table.

Table 1. The role of trust – literary review.

The role of trust	Proponents of the viewpoint
Trust is necessary in conditions of high ambiguity, uncertainty and complexity.	Lewis and Weigert (1985), Shapiro (1987), Nooteboom (1996), Shaw (1997), Nahapiet and Ghoshal (1998), Lane (1998), Deering and Murphy (1998), Sako (1998), Rousseau et al. (1998), Senge et al. (1999), Overlaet (2000), Costa (2000)
2. Trust provides a sense of security that allows one to function in the above mentioned conditions	McAllister (1995), Ellinor and Gerard (1998), Ryan and Oestreich (1998), Reina and Reina (1999), Senge et al. (1999), Overlaet (2000)
3. Trust enables the taking of risks necessary to act in the above mentioned conditions	Katzenbach et al. (1995), Shaw (1997), Lewis (1999), Senge et al. (1999), Reina and Reina (1999), Costa (2000), Overlaet (2000)
4. Trust enhances flexibility, increases the ability to change, and supports going through the process of radical changes.	Argyris (1970), Katzenbach et al. (1996), Shaw (1997), de Geus (1997), Ellinor and Gerard (1998), Deering and Murphy (1998), Ryan and Oestreich (1998), Reina and Reina (1999), Senge et al. (1999), Overlaet (2000), Costa (2000)
5. Trust supports learning, creativity and innovation	Senge (1990), Zand (1997), McAllister (1997), Shaw (1997), Ghoshal and Bartlett (1997), Nahapiet and Ghoshal (1998), Rousseau et al. (1998), Lazaric and Lorenz (1998), Sako (1998), Ryan and Oestreich (1998), Lane (1998), Deering and Murphy (1998), Reina and Reina (1999), Senge et al. (1999), Lewis (1999), Overlaet (2000), Costa (2000)
6. Trust is the "lubricant" of human relations that increases their effectiveness	Blau (1964), Zucker (1986), Fukuyama (1995), Hosmer (1995), Hollis (1998), Deering and Murphy (1998)
7. Trust improves and sustains cooperation through favouring sharing of information, enriching relations, increasing openness and mutual acceptance, streamlining conflict resolution and cooperative problem solving.	Argyris (1970), Zand (1972, 1997), Deutsch (1973), Zucker (1986), Shapiro (1987), Senge et al. (1994, 1999), Katzenbach et al. (1995), Mayer et al. (1995), Ross and LaCroix (1996), Wheatley and Kellner-Rogers (1996), Shaw (1997), Ghoshal and Bartlett (1997), Deering and Murphy (1998), Lane (1998), Tsai and Ghoshal (1998), Elangovan and Shapiro (1998), Whitener et al. (1998), Rousseau et al. (1998), Zaheer et al. (1998), Lewis (1999), Reina and Reina (1999), Costa (2000)
8. Trust reduces the need of compiling detailed contracts and continuous control.	Bradach and Eccles (1989), Shaw (1997), Lane (1998), Rousseau et al. (1998), Zaheer et al. (1998), Deering and Murphy (1998), Lewis (1999), Nooteboom (1999a), Senge et al. (1999), Sen (2000), Costa (2000)
9. Trust is a value in itself.	Blau (1964), Bradach and Eccles (1989), Powell (1996), Helper (1993), Sako (1998), Gulati (1995) Nooteboom (1996), Ryan and Oestreich (1998)

Source: [Six, 2004].

The theses presented on the role of trust for organizations are supported by numerous confirmations in empirical research. The research results are, as following [La Porta et al., 1997, Grudzewski et al. 2009, Raes et al. 2006]:

- trust improves cooperation, especially while concerning large organizations [La Porta et al., 1997],
- trusting employees leads to gaining competitive advantage, which offsets the risks of opportunism and breach of trust [Handy, 1995],
- trust reduces transaction's costs [Dyer, Chu, 2003],
- trust supports organization's innovation [Herting, 2002], tendency to trust may be explained by as much as 6% changeability of company's innovation in the second degree regression [Sankowska, 2007],
- companies, whose employees strongly trust their superiors, report better financial results:
- companies, whose employees strongly trust their superiors, report 108% shareholder return within 3 years, in comparison to 66% in companies with low levels of trust [Watson Wyatt Worldwide: Hacker, Willard, 2002 report],
- employees' trust in the managers influences profitability: company whose managers improved their evaluation in terms of honesty by just 1/8 point on a five-point scale report a 2,5% annual income increase [Simson, 2003],
- trust has a positive effect on the level of job satisfaction of the employees [Ward, 1997],
- trust has a positive effect on the process of communication in a company [Boss, 1978; Zand, 1972],
- trust has a negative effect on the occurrence of conflicts in the organization [Porter, Lilly, 1996],
- trust has a positive effect on the effectiveness of team performance [Raes et al., 2006].

In consequence of the advancement of knowledge on trust and its importance for company's success as well as the development of societies and economies, the need to cultivate trust is more widely recognized, on both the macro and microeconomic levels. This is reflected, among other things, through the usage of the term "Age of Transparency" in relation to the modern world (era characterized by the increased level of trust and credibility as the foundation of cooperation), and even, in the context of economic life, "trust-based economy" and "trust-based organization". Hence, in terms of business management, the need for trust management, management through trust, or "trust-sensitive management" is more often mentioned. Many of the investigations on these issues focus on ways and means of consciously developing trust within the organization.

4. Trust building within organizations

4.1 The process of trust building

Trust is a dynamic phenomenon that changes over time. Changes apply to strength, turn (distrust: "-", trust: "+"), scope and bases. A characteristic feature of the process of trust evolution is the fact that its construction is usually slow, gradual, while destruction (loss of trust and turn towards distrust) is relatively quick.

Different authors describe the building (evolution) process of trust differently, mainly due to the fact that they analyze this problem from viewpoints of different scientific fields (among others: economy, sociology, psychology), different theories, adopting different criteria as the key ones to distinguish consecutive phases of the process, as well as identifying different sources of trust (although in this case, the differences mainly concern terminology). Nevertheless, those viewpoints are not mutually exclusive, but they complement each other and present different dimensions and features of the same phenomenon [cf. Grudzewski et al. 2009].

An example of the description of the trust building process is a three-stage model by R. Lewicki and B. Bunker [1996]. They distinguish three types of trust – based on calculation, knowledge and identification, which at the same time constitute successive levels of trust development. The transition from the level of trust based on calculation to the trust based on knowledge is caused by replacing the image of contrast between the one and the other with the vision of assimilation, while the next transition is connected to the development of identification with the other.

A different model of the trust building process is presented by S. Covey [Covey, Merrill 2006], who distinguishes five "waves of trust". He believes that the first stage of this process is building trust in oneself, which conditions personal credibility, while successive waves of trust are: relationship trust and credibility, organizational trust, market trust, and societal trust.

Despite the differences in the way the process of building trust is described, and the terminology used, experts agree on the basic elements and features of the process. While placing trust is not a single act, but the beginning of a long relationship, during which the recipient's credibility is usually tested on subsequent stages and, depending on the outcome of these tests, trust is withdrawn, left at the same level or expanded and deepened. The credibility of the potential trust recipient is assessed at all times. Initially, trust is limited and the trusting person bears relatively small risk. With each successive act the trusting person takes bigger risk (or smaller, in the case of the withdrawal of trust), but at the same time previous "tests of trust" make the risk-taking more reasonable. [Sztompka, 2007].

4.2 Means and tools of intra-organizational trust building

The above mentioned arguments emphasizing the importance of trust within organizations are gradually and empirically confirmed, thus a question that arises from management and organizational science, seems natural – whether and to what degree one can intentionally create trust within a company. Such a possibility is confirmed by numerous empirical research (cf. e.g. Six, Sorge, 2008]. Nevertheless, analysts of the phenomenon of trust within organizations unanimously claim that this task is very difficult, requiring thoughtful, comprehensive, multifaceted activities [Greiling, 2007]. Therefore, we speak more and more of trust management, management through trust or, according to J. Sydow, "trust-sensitive management", which should rely on considering ways in which decisions, actions, organizational arrangements, procedures and other elements of business management influence trust [Sydow, 2000].

Since trust is a phenomenon deeply rooted in culture and individual personality traits, it does not submit to modelling easily. As once placed trust meets with the expectations of the trusting person, it has a tendency to reinforce itself (analogical tendency is demonstrated by distrust), the key is to create within an organization suitable conditions for developing trust, as well as factors supporting, or even coercing, credibility. One has to keep in mind that building trust within an organization is a lengthy process, very sensitive to manipulation. If the will to trust employees is not authentic, but it is ostensible and serves as a way of management, designed mainly to improve organizational performance, then such trust is harder to build and easier to lose. Therefore, on the one hand it is desirable to raise awareness about the importance of trust within an organization and the need to include strategies of building trust in management, on the other hand, the management should not "show off" with the intention of trust-sensitive management, as it may produce effects contrary to what was intended - arouse mistrust among employees [Grudzewski et al., 2009]. Nevertheless, building intra-organizational trust is a task far easier than building trust in a society, due to the closeness and frequency of contact between the members of the organization. Of course, it is easier to build a culture of trust in the organization, which from the beginning has a certain level of mutual trust among members or is characterized by neutrality in this respect, in contrast to the organization which is characterized by widespread distrust.

In specialist literature, one may read of many proposals of methods, actions and solutions that contribute to building organizational trust. The table below provides examples of such methods, grouped by the dimensions of trust to which they relate to, and the corresponding bases on which trust is built. The classification of these methods is a result of literature study and the author's own reflection, and it is based on the division of dimensions and bases of trust

proposed by P. Sztompka [2007], since it is one of the most comprehensive descriptions of the bases (sources) of trust that can be found in specialist literature and contains most of the proposals of other authors [cf. Grudzewski et al. 2009, p.28].

Table 2. Dimensions of trust and corresponding means of building intraorganizational trust.

Dimensions of trust	Pillars (bases) of trust	Detailed bases (sources) of trust	Possible means and tools of building intra-organizational trust
		Perspective of a person who is to be trusted: - person's motivations and interests, individual tendencies to specific actions, declarations and promises, possibilities of meeting the expectations of the trusting person	- solutions that make assistance and cooperation important for the personal interests of the employees (e.g. salary dependent on team's performance and organization, providing employees with mainly positive feedback on their activities) - allowing employees to act, equipping them with appropriate tools and autonomy, delegation of authority,
Trust as a relationship with other people	Evaluation of partner's credibility	2. Individual traits of the person who is to be trusted: - personality, openness, status and role, reputation – actions and individual traits present as well as the ones observed in the past, along with competence, image – appearance, bearing	- little opportunity to shape individual traits - emphasis on the recruitment of employees with the right qualities - openness, honesty, kindness, etc clearly defined organizational roles and corresponding expectations, - many possibilities to develop competences of organization members, for example through courses, coaching, mentoring, supporting organizational learning, knowledge sharing noticing and appreciating voluntary cooperation and actions that build trust and credibility,
		3. Context, in which partners operate: - possibility of enforcing credibility by the partner through internal agendas, self-limited capacity for action – for demonstrational increase of credibility, situational circumstances	- creating institutional conditions and procedures for the indirect enforcement of credibility of other employees (e.g. 360° assessment, evaluation of the employee not only in terms of results, but also means leading to them) - respecting employees rights, caring for their needs (e.g. fighting against discrimination, outplacement, opinion surveys) - reducing psychological distance (e.g. informal meetings, social events)

Dimensions of trust	Pillars (bases) of trust	Detailed bases (sources) of trust	Possible means and tools of building intra-organizational trust
Trust as a relationship with other people	Evaluation of partner's credibility	inducing trust – clarity, transparency, closeness of relationships, dependence on the partner, consequences of failure to meet the expectations (e.g. deterioration of company's results)	- delegation of authority from top to bottom in the organizational hierarchy, - including employees into the decision-making process - reducing control - promoting open and effective communication (vertical and horizontal) and sharing knowledge, - clarity and transparency of procedures (e.g. performance assessment, criteria for promotion), duties assigned to positions, - clear communication of mission and vision, organizational aims and organizational units, expectations and responsibilities - overt and truthful way of informing employees, - accepting the employees' right to make mistakes and to promoting joint problem solving and constructive discussion - demonstrating management's confidence in the employees and their skills (e.g. by assigning challenging tasks, increasing scope of authority) - applying the same standards of evaluation to all members of the organization.
Trust as a psychological tendency	Individual impulse of trust	1. Innate personality traits 2. Acquired (resulting from a particular course of life experience) tendency to trust 3. Influence of emotion and "intuition"	- little possibility of intentional shaping - impulse of trust will be shaped gradually along with the real, systematic occurrence of positive experiences associated with the bestowal of trust and meeting the expectations in the organization, - methods and techniques of shaping organizational culture (among others: exercises and courses building up group morale, skills and will to cooperate, feeling of unity and solidarity; jointly creating a code of conduct in organization and abiding it; endowing trust, central importance of kindness and honesty, creating culture focused on relationships, giving

Dimensions of trust	Pillars (bases) of trust	Detailed bases (sources) of trust	Possible means and tools of building intra-organizational trust
Trust as a psychological tendency	Individual impulse of trust		example of the desired behaviour from "the top" of the organization, stigmatizing opportunism) - initial impulse of trust (trust test) coming from "the top" of the organization
Trust as a cultural rule	Cultural norms	1. Solid experiences with various kinds of trust, accumulated and converted into norms and rules – norms and rules indicating acceptable way of conduct in a given group, e.g. requiring trusting and demonstrating credibility	- difficult and long-lasting process of changing organizational culture - methods and techniques of shaping organizational culture (among others: exercises and courses building up group morale, skills and will to cooperate, feeling of unity and solidarity; jointly creating a code of conduct in organization and abiding it; endowing trust, central importance of kindness and honesty, creating culture focused on relationships, giving example of the desired behaviour from "the top" of the organization, stigmatizing opportunism)

Source: Own work based on classification of dimensions and sources of trust by P. Sztompka [Sztompka 2007].

Even on the basis of a cursory analysis of the above table, it can be stated that some of the dimensions and foundations of trust submit to modelling in a greater extent than others. Most of potential possibilities of influence can be identified in the first and the last dimension of trust. While the pillar of trust that is the most clusive one for the organizational policy (with the exception of the recruitment policy) is the individual impulse of trust (innate and acquired during the socialization process tendencies to put trust in others) as well as the area of personal traits of the individuals creating the organization.

Among the researchers of the phenomenon of trust there is a broad agreement on the need to adapt trust building plans and actions to the specificity of a particular organization. Out of already mentioned ways of building trust and creating conditions for its development, probably the most widely postulated in the literature are: the formation of appropriate attitudes, norms of conduct and organizational values (kindness, honesty, openness, credibility, willingness to trust others etc.), ensuring effective, open communication, caring for the rights and needs of the employees and enforcement of credibility.

4.3 Building trust in vertical and horizontal relationships within the organizational hierarchy

While analyzing the processes and methods of building intraorganizational trust one should take a closer look at two different cases – building trust in vertical relationships (superior-subordinate) and horizontal (between employees of equal positions in the organizational hierarchy).

A superior, who is not trusted by the subordinates, is able to perform his duties related to team management only at the minimal, required degree. Moreover, he or she will perform them with relatively greater effort and during a longer period of time, as it can be done only with an authoritarian management style, based on inducing fear and resorting to constant control. Employees, who do not trust their superior, experience lower job satisfaction, they are less motivated (what is more, sources of their motivations to work are mostly external), and less committed to the realization of company's goals. By analogy, superior who is trusted by the subordinates, repays them with trust and demonstrates credibility, makes employees feel appreciated, more engaged in the work. Employees experience a relatively higher degree of motivation (especially internal) and are more efficient.

Furthermore, gaining subordinates' trust is a condition that has to be met by the superior in order to move from the less efficient "directing" towards the nearest to the ideal way of managing people – "leading". Without going into the question of the essence of leadership in an organization (about which there is still no scientific consensus), I shall quote only two authorities in the field of management science. R.W. Griffin writes that a leader is a person who can affect (influence) the behaviour of others without resorting to coercive measures, who is accepted by others in the role of the leader and is able to persuade members of the organization to cooperate in the interest of the organization [Griffin, 2004]. Whereas P.F. Drucker says that "the only thing you can say about a leader is that a leader is somebody who has followers", adding that "an effective leader is not someone who is loved or admired. He or she is someone whose followers do the right things." Different traits of a leader tend to be highlighted and described as crucial, yet the study shows that there is no one set of leader characteristics that can ensure effectiveness. However, even a cursory analysis of views on the essence of leadership indicates that leading employees is impossible in a situation where they do not trust their superior.

Thus a question arises, how trust can be built in relations between superiors and their subordinates. F. Bartolome postulates, that subordinates' trust should be built with six tools [Grudzewski et al., 2009]:

- Communication with its crucial elements: to inform, to ensure feedback, to explain policies and decisions, to avoid withholding information and to use it as a form of reward,
- Support to show concern, interest in the personal and professional
 matters of the employees, to be accessible and helpful, to take care of
 the employees' interests, to encourage innovation and expression of
 opinions, to be a mentor and/or a coach.
- Respect to respect employees' dignity, their opinions and values,
- Fairness objectivity of the evaluation, equal standards for everybody, appreciation of achievements, acting accordingly to (jointly) established rules and norms.
- Predictability consistent behaviour, reliability, keeping promises, carrying out responsibilities
- Competence to display great expertise and business skills, personality traits, effectiveness and ways of action

E. Whitener et al. [1998] add to the abovementioned traits and ways of behaviour, a very important element - sharing (delegating) control, defined as the delegation of authority, and considering the opinions of employees in the decision-making process. Additionally, W.M. Grudzewski et al. [2009] observe that the ideal situation is when the actions and attitudes of the leader are authentic in all of the areas mentioned above, that is with loyalty to oneself and fidelity to the professed values.

A second fundamental area of building intra-organizational trust is supporting this process in relation to teams or organizational units consisting of employees of the same position in the hierarchy of the company and having common goals. It is a process far more complicated due to the greater number and multidirectional character of relationships in which it is conducted. For synthetic and clear discussion of the critical factors influencing its course and for proposing methods and tools for building trust in the team, they are presented in the table below. This classification is the result of literature study and personal reflections of the author.

Table 3. Factors influencing the trust building process within a team and corresponding ways of action

Group of factors	Factor influencing team's trust	Factor's influence on building trust (The difficulty of building trust usually increases when:)	Actions designed to support the trust building process in a team
	1. team (among others: number of members, prior relationships, hetero-/ homogeneity – differences in professed values, way of conduct, personality traits)	 increasing the size and heterogeneity of the group, team members did not know each other before, 	- Appropriate selection of team members (in terms of the appropriate number of members in relation to the requirements of the task, the similarity of personality traits, shared values, etc.)
Team characteristics	2. substantive competence of team members and their complementarity	 decreasing level of substantive competence of team members, decreasing level of competence complementarity (necessary to perform the task) of team members 	- appropriate selection of team members (in terms of their competence, taking into consideration task requirements),
Team cha	3. skills and attitude to cooperation and teamwork	 reluctance to cooperation increases, decrease of teamwork skills, 	- promoting positive attitude to cooperation and supporting teamwork (e.g. by assigning teams "training" exercises, courses, coaching, development of appropriate organizational culture),
	4. Communication skills	- decrease of effective communication skills and openness to others	- supporting openness and effective communication skills (e.g. through exercises, courses, coaching, modelling organizational culture and the example coming from the top)
	5. team cohesion (dependency and compatibility of personal motivations and the motivations of the team)	- decreasing level of dependency and similarity between team motivations and personal motivations of the members	- ensuring the greatest possible compatibility between personal motivations and team motivations (e.g. through an appropriate system of rewarding members for the team's success, appropriate selection of team members - eliminating units where conflict of interest would occur),

Group of factors	Factor influencing team's trust	Factor's influence on building trust (The difficulty of building trust usually increases when:)	Actions designed to support the trust building process in a team
Team characteristics	6. other characteristics of team members (among others: personality traits, attitudes and social skills, reputation)	- declining number of members with traits facilitating trust building	- appropriate selection of team members: appropriate number of members with traits facilitating trust building (openness, honesty, kindness, high level of competence, etc.),
Team	7. expected timespan of the relationships between team members	- short-term, temporary relationships	 in case of recruiting team members from one organization long-term relationships are usually ensured, appropriate selection of team members
	1. dependency between team's success and individual effort and cooperation	- decreasing level of dependency between team's success and individual effort (because of the decrease of the need for harmonious and effective cooperation)	- appropriate task design (ensuring each member's contribution to the success of the team, but also tools of control and enforcement of credibility)
Task characteristics	2. Consequences of failure or success	- decreasing value of the result (reward) achieved by realization of the task by the team	 informing employees about the team's goal and the importance of carrying out the task for the whole organization establishing and presenting appropriate system of rewards and penalties, depending on the performance of the team (positive reinforcements valuable for the team are proffered),
	3. task characteristics (interdependence, comprehensiveness, difficulty and complexity)	- decreasing degree of interdependence of the components of the task realization, comprehensiveness and complexity of the task	 if the task to be performed by the team is relatively easy, the team can be assigned with "training" exercises unrelated to the team's goal, but designed to boost cooperation, creativity and trust building, if tasks are of high level of difficulty and interdependence, then appropriate conditions, tools and scopes of authority must be provided,

Group of factors	Factor influencing team's trust	Factor's influence on building trust (The difficulty of building trust usually increases when:)	Actions designed to support the trust building process in a team
Organizational context	1. external factors of the team (organizational context in which the team operates, including, e.g. organizational culture, procedures, management style)	- external factors of the team do not facilitate trust building (see: Table 2)	- see: Table 2.

Source: own study based on the classification of factors influencing trust building in teams of employees A.C Costa et al. [2001], B.D. Adams [2003], P. Sztompka [2007].

The above presentation of the ways individual factors influence trust building within a team is a mere simplification for analytical purposes. In reality, these factors may influence each other (e.g. the level of difficulty of building trust within a team decreases when the level of dependency between team's success and individual effort and cooperation increases; but when, for instance, team's success does not correspond to personal motivations of team members, this effect is no longer obvious, due to the increasing risk of failure).

A. Costa, on the basis of research conducted on a group of 131 teams, found that the team characteristics are the most important for the team trust, among which the author distinguishes: teamwork preferences, skills adequate for work, employment stability and team's cohesion. According to the research of this author, work specificity and organizational context play a lesser role in this regard [Grudzewski et al. 2009].

5. Conclusion

The development of theories on trust and still new empirical evidence confirming its influence on company's performance and success, lead us to conclude that this factor should be taken into consideration in the organizational management systems. The observed tendencies, on the one hand, to the increasing importance of trust in today's business world, – while on the other hand, the erosion of trust in companies, have serious implications for both theory and practice of management. Among other things, it is necessary to develop the concept of trust management, along with the development of a comprehensive set of guidelines, methods and techniques for building trust

in the organization. For this purpose, it is crucial to broaden the knowledge on mechanisms underlying this process.

Despite some gaps in current knowledge and the diversity of numerous viewpoints, it can be stated, with a small margin of error, that although the process of building trust is extremely difficult, long lasting and probably never ending, the undertaking of this effort seems to be fully justified.

References

- 1. Adams B.D., *Trust Development in Small Teams*, Department of National Defence, Guelph 2003.
- 2. Arrow K., *The Limits of Organization*, Oxford University Press, New York 1974.
- 3. Coleman J. C., *Social Capital in the Creation of Human Capital*, "American Journal of Sociology", 1988, no. 94.
- 4. Costa, A.C., Roe, R.A. Taillieu, T., *Trust within teams: The relation with performance effectiveness*, "European Journal of Work and Organizational Psychology", 2001, no. 10(3).
- 5. Covey S., Merrill R., *The Speed of Trust: The One Thing That Changes Everything*, Free Press, New York 2006.
- 6. Drucker P. F., *Przedmowa: zbyt wielu generałów uszło z życiem*, [w:] *Lider przyszłości*, ed. Hesselbein F., Goldsmith M., Beckhard R., Business Press, Warszawa 1997.
- 7. Fukuyama F., Zaufanie. Kapitał społeczny a droga do dobrobytu, Warszawa Wrocław 1997.
- 8. Greiling, D., *Trust and performance management in non-profit organizations*, "The Innovation Journal: Public Sector Innovation Journal", 2007, no. 12(3).
- 9. Griffin R.W., *Podstawy zarządzania organizacjami*, Wydawnictwo Naukowe PWN, Warszawa 2004
- Grudzewski W.M., Hejduk I.K., Sankowska A., Wańtuchowicz M., Zarządzanie zaufaniem w przedsiębiorstwie, Wolters Kluwer Polska, Kraków 2009.
- 11. Knack, S., Keefer, P., *Does social capital have an economic pay-off? A cross country investigation*, "Quarterly Journal of Economics", 1997, no. 112(4).
- 12. Lewicki R, Bunker B., *Developing and Maintaining Trust in Work Relationships* [w:] *Trust in Organisations: Frontiers of Theory and Research*, ed. R. Kramer, T. Tyler, Sage Publications, London 1996.
- 13. Lin N., *Social Capital: A Theory of Social Structure and Action*, Cambridge University Press, Cambridge 2001.

- 14. Luhmann N., Trust and Power, New York 1979.
- 15. Seligmann A. B., The Problem of Trust, Princeton 1997.
- 16. Six F., Sorge A., Creating a High-Trust Organization: An Exploration into Organizational Policies that Stimulate Interpersonal Trust Building, "Journal of Management Studies", 2008, no. 45/5.
- 17. Six F., *Trust and trouble: Building interpersonal trust within organizations*, PhD thesis, Erasmus University Rotterdam, Rotterdam 2004.
- 18. Sydow J., *Understanding the Constitution of Interorganizational Trust*, [w:] *Trust in and between organizations*, ed. C. Lane and R. Bachmann, Oxford University Press, Oxford 2000.
- 19. Sztompka P., *Zaufanie. Fundament Społeczeństwa*, Wydawnictwo Znak, Kraków 2007.
- 20. Whitener, E.M., Brodt, S.E., Korsgaard M.A., Werner, J.M., *Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior*, "Academy of Management Review", 1998, no. 23.
- 21. Zack P.J., Knack S., Trust and growth, "Economic Journal", 2001, no. 111.
- 22. Zaheer A., McEvily B., *Perrone V., Does trust matter? Exploring the Effects of Inter-organizational and Interpersonal Trust on Performance*, "Organization Science" 1998, no. 9(2).
- 23. Raes A., Heijltjes M., Glunk U., Roe R., Conflict, Trust, and Effectiveness in Teams Performing Complex Tasks: A Study of Temporal Patterns, Research Memoranda, Maastricht Research School of Economics of Technology and Organization, 2006, no. 8.

Marcin Jamroży*

TAX CONTROVERSY CONCERNING EMPLOYEE STOCK OPTIONS

Abstract

This paper aims to analyze the tax consequences of granting employee stock options. There is much controversy as to the sources of revenues and the date on which revenues are generated. The prevailing view is that taxable income is obtained only when shares acquired as a result of stock options are sold and becomes capital income and not employment related. This has beneficial effects for taxpayers participating in such a programme. They can avoid double taxation on their income, first, when they exercise rights under options, and second, when they sell the acquired shares.

Key words: employee stock options, incentive instrument, revenues from employment relationship, revenues from capital gains, sale of call options, sale of stocks

1. Introduction

Stock options for the purchase of stocks in an enterprise are a particular form of remunerating employees, generally employed in managerial positions. The entitled person acquires, within a stock option programme, a benefit in the form of the right to acquire a specific number of stocks in the corporation in which they are employed. This is most frequently after an elapse of a defined period of time and happens without payment or partially without payment. The price must not be lower than the nominal value of the purchased stocks (article 309, section 1 of the Commercial Companies' Code). A managerial options programme may be offered as an additional emission of stocks, subscription bonds with priority shares, convertible bonds or warrants for shares swapped.

Employee (managerial) stock options constitute derivative financial instruments for which the underlying instrument are stocks (article 2, section 1, point 2 of the Act of 29th July 2005 on Trading of Financial Instruments (Journal of Law, No 183, position 1538 with subsequent changes – hereinafter

^{*} PH.D., Department of Corporate Finance, Warsaw School of Economics.

referred to as ATFI)). Employee (managerial) stock options are known as Call Options. The acquisition of Call Options from an employer gives the right, but not the obligation, to an employee to buy a specific number of stocks in the company at a previously determined price. The option is granted to the employee free of charge or below its market value at the time it is granted usually only after a certain period of time determined in the contract has elapsed and after fulfilling the acquisition requirements. It is then possible to exercise the underlying rights resulting from employee stock options. Moreover, due to the postponement in realization of the benefit, the option plan enables the employer to keep key employees employed. Employee stock options are usually not subject to sale.

The aim of this article is to present both the consequences of granting call stock options to employees from a tax point of view as well as the consequences of exercising the rights resulting from call options and from the sale of acquired stocks, or eventually the early sale of the options. The analysis will be made from the perspective of a company being a taxpayer of corporate income tax (CIT) and subject to unlimited tax liability in Poland (see article 3, section 1 of the Act of 15th February 1992 on Corporate Income Tax; consolidated act, Journal of Law from 2011, No 74, position 397 with subsequent changes – hereinafter referred to as ACIT), and the beneficiaries of the Call Options are individuals having place of residence both in Poland (residents) and abroad (non-residents).

From the tax point of view, it's unclear as to whether these options should be classified, being a source of revenue for employees, as employment income or capital gains (accordingly article 12, section 1 as well as article 17 section 1 of the Act of 26th July 1991 on Personal Income Tax, consolidated act, Journal of Law from 2010, No 51, position item 307 with subsequent changes – hereinafter referred to as APIT)) and when this revenue (income) is generated. At the same time one should consider the tax consequences of the subsequent sale of the stocks purchased within the employee stock option programme.

This paper will also address the international aspects of taxation of such an incentive instrument. In this paper reference was made to the Model Tax Convention OECD before the updating of 22th July 2010 constituting a model for the more than 80 agreements on the avoidance of double taxation hitherto concluded by Poland (OECD Committee on Fiscal Affairs, Model Tax Convention on Income and on Capital, Condensed Version 2008; – hereinafter referred to as MTC OECD). The provisions of the hitherto agreements should be interpreted on the basis of the Commentary on MTC OECD prior to updating.

2. Taxation simultaneous with granting options

If the beneficiary of the options is an individual being a resident, while simultaneously being in an employment relationship with the enterprise, which is realizing the employee stock option programme, issues to be considered would be whether granting the options causes a tax liability, and if so, to which source of revenues the benefit should be classified; employment related or capital gains.

Revenues from an employment relationship would be any kind of cash payment or the value of a service or form of renumeration to an employee remaining in a service relationship, employment relationship or co-operative employment relationship with the employer (article 12, section 1 and 4 APIT). Whether the benefit should be considered a revenue from an employment relationship depends on whether it is available exclusively to employees, or also to other non-related persons presently or previously employed with an employer (the Supreme Administrative Court (NSA) ruling from 26.03.2003, 2003, file no. III SA 2219/92). The revenue is classified as employment related only when the benefit is directly related with the work performed by a person (the Supreme Administrative Court ruling of 06.05.1994, file no. SA/Łd 465/94). In the ruling of the District Administrative Court in Wrocław of 10th February 2005, file no. I SA/Wr 1038/03 there is emphasis on the fact that it is essential whether the employment relationship is legally binding or not in relationship to the benefit.

In my opinion, obtaining the right to Call Options without any payment for the purchase of stocks, does not constitute as yet, under APIT, revenue from an employment relationship since on the day of obtaining this right, an employee does not acquire any increase in net worth. He has only the potential possibility to purchase stocks at the price previously determined or without any payment. The employee may or may not exercise this right. Most frequently an employee does not have the right to pledge, sell and waive the right to stock options obtained from the employer. This makes it difficult to determine their market value.

Revenues from capital gains are considered due for taxation, even if not factually received as are revenues from the realization of the rights resulting from securities, (referred to in article 3, point 1, letter b of the ATFI), that is other sellable property rights which arise as a result of emission, and which incorporate entitlements to purchase or take over securities or which are performed through monetary settlements (derivative instruments) – or in the case of particular stock options (article 17, section 1, point 6, letter b, point 10; article 17, section 1b of the APIT). For that it is only the realization of the rights resulting from the stock options which may result in the generation of revenues from capital gains.

However, the revenue obtained from the above title should not be considered to arise from other sources of revenues referred to in article 20. section 1 of the APIT (the District Administrative Court in Warsaw ruling from 19.03.2004, file no. III SA 2501/02). In the case of the realization of property rights, a particular regulation pertaining to the source of revenues, capital gains, is binding. However, sometimes due to the tax bodies, an employee could obtain revenues from other sources if costs would be borne by a third party (a dependent company or a parent company). In such case an employee's revenue is determined to be equivalent to the value of costs borne by an employer for the realization of the incentive programme. At the same time, the sale of purchased stocks at a later date as a result of the realization of stock options would result in the generation of revenues through capital gains, referred to in article 17, section 1, point 6 of the APIT. However, it would be possible to consider revenue which previously had been qualified as revenue from other sources or as revenue from an employment relationship to be income-generation expenses from the sale of these stocks (for example an individual interpretation of the Head of the Internal Revenue Chamber in Warsaw from 27th April 2010, IPPB2/415-37/10-4/AS). In my opinion, even when costs connected with the option programme are borne by an entity not being an employer, the benefit is still in direct relation to the existing employment relationship and, thus, considering them to be as a result of other sources of the revenue would be inappropriate.

3. Taxation simultaneous with exercising options

3.1. Residents as an option beneficiaries

In terms of benefits on the date of exercising stock options there are significant interpretational differences. However the following points for qualifying these benefits give some indication (Jamroży, Spotowska 2011, Opodatkowanie opcji pracowniczych...):

1) Revenues from an employment relationship: the difference between the present market value of stocks and the agreed price to be paid for the stocks by the entitled employee is treated as a benefit partially gratuitous and its value is added to the revenue from an employment relationship on the day of exercising these options; that is, on the day of the purchase of the stocks on preferential terms. As a result the income is taxed according to a progressive tax scale (18, 32 %), and within the year an advance on the tax is collected. However, the sale of stocks purchased as a result of the realization of stock options results in the generation of capital gains (for example interpretation of the Head of the Internal Revenue Chamber in Warsaw of 8th December 2008, IPPB2/415-1334/08-4/MK).

- 2) Revenues from other sources in the situation when the acquisition costs of the stocks are finally borne by a third party not being an employer; for example a specified company being part of a capital group (for example interpretation of the Head of the Internal Revenue Chamber in Warsaw of 12th May 2009, IPPB2/415-123/09-2/AK; interpretation of the Head of the Internal Revenue Chamber in Warsaw of 10th December 2009, IPPB2/415-554/09-8/MK).
- 3) Revenues from capital gains: income from the sale of securities or derivative financial instruments and from the exercising of the underlying rights is taxed at a rate of 19% (article 30b, section 1 of the APIT). The income subject to taxation is the difference between the sum total revenues as a result of selling derivative financial instruments and from the exercising underlying rights and expenses related to their acquisition. In the case that the exercising rights result from employee stock options, deductible costs will not be generated. Such a position was taken by the Head of the Internal Revenue Chamber in Katowice as his individual interpretation of 14th July 2008 (IPPB2/415-719/08/HS), stating that at the moment of exercising underlying rights by purchasing stocks, the tax-payer receives an income equivalent to capital gains revenues and should declare the total of these income on his PIT-38 tax return. The tax-payer is not allowed to decrease the revenues (the values of acquired stocks) by income-generating costs if he has not borne any expenses for the acquisition of these options. However, the sum of the income is equivalent to the sum of revenues obtained free of charge from exercising these underlying rights.
- 4) Revenues are not generated on the day of the realization of employee stock options but only upon the sale of previously acquired stocks. This income constituting the surplus between the market value of the stocks acquired by the persons entitled on the basis of a general shareholders meeting and expenditures borne for their acquisition is not subject to taxation at the time those stocks are received; this principle applies accordingly to income constituting an excess of the market value of stocks over expenses made for their acquisition from the company having legal status, which received the stocks exclusively in order to transfer their ownership to persons entitled on the basis of the resolution of the general meeting of shareholders of the issuing company (article 24, section 11 of the PIT). This regulation covers situations where the company itself issues the stocks directly to eligible employees and situations where the company issues the stocks to another company with an indication of how to dispose of those shares for employees. For deferral of tax it is enough, therefore, that the contract under which

the entitled person receives Call Options to buy stocks in the company be approved in the form of a resolution of the general meeting of shareholders. The income is taxed according to regulations covering income from capital gains (article 30b, section 1; section 2, point 1 of the APIT). The deferral of taxation on the basis of article 24, section 11 of the APIT applies also to stocks issued by both Polish and foreign companies (for example the District Administrative Court in Warsaw in the ruling of 15th September 2009, file no. III SA/Wa570/09).

Moreover, in determining the direction of interpretation the position of the Supreme Administrative Court presented in the ruling of 27th April 2011 (file no. II FSK 1410/10) should be adopted. It states that an employee who acquires stocks in a foreign company within the incentive plan is not subject to revenues from an employment relationship, taking into account that the income subject to taxation appears only in the final stage of an incentive plan; that is at the point when the stocks are sold by an employee whereas the sources of revenue are the capital gains referred to in article 17, section 1, point 6, letter a of the APIT. According to a court ruling, the opposite argument would lead to double taxation - initially at the time when stocks are received and the second time at the time of their disposal.

It is also in line with the views expressed and, among others, by the District Administrative Court in Warsaw in the ruling of 15 September 2009 file no. III SA/Wa 570/09, that upon receipt of shares on preferential terms, the capital increase obtained by a given person, regardless of the source and reason for obtaining this capital, is only considered potential. These stocks are characterized by the fact that they generate revenues only at a future time in the form of dividends or in the case of their disposal – in the form of the difference between revenue from the sale and the costs incurred for their purchase. According to the court ruling this revenue is not generated upon receipt by an employee of stock options, or at the time of acquisition of stocks, but only when they are sold. It is then that the actual capital increase to the seller occurs. The sale of shares acquired both against payment, as well as free of charge, by the participants of the incentive programme means lower income-generating costs resulting in an increase in the tax base and higher income taxes. An advantage for a participant of the incentive programme comes in the form of free acquisition of stocks, which will be taxed only upon sale of stocks acquired in this fashion. Taxation of income for an employee at the time of the purchase of the stocks, understood as the difference between the market price and the preferential price of the acquisition of the stocks, could cause that the tax-payer would pay tax also in the situation when in an economic sense he would infer losses as the price of the sale of the stocks would be lower than the price of their acquisition (see also the ruling of the

District Administrative Court in Warsaw of 23th September 2009, file no. III SA/Wa 411/09 and of 28th October 2009, file no. III SA/Wa 628/09).

The position taken by administrative courts is undoubtedly beneficial to taxpayers. A taxpayer who devotes his revenues (income) obtained from an employment relationship for the purchasing of shares is considered to have after-tax income or in other words net income after taxation. The subsequent capital gains arising from the sale are re-taxed. But the taxpayer being a participant of the employee stock options programme avoids double taxation as he is taxed for the increase in net worth only upon the disposal of shares acquired in connection with the stock options.

3.2. Non-residents as option beneficiaries

If the beneficiary of options is registered as having his place of residence in a different country which has a tax agreement with Poland and thus avoiding double taxation, first of all one should consider whether options received by employees can be classified as income from employment on the basis of article 15 of the MTC OECD. This determination should be reached at autonomously on the basis of a bilateral agreement; that is regardless of the assignment of benefits to a particular source of revenue under domestic law. Article 15, section 1 of the MTC OECD addresses salaries, wages and other similar remuneration derived by a resident in respect of an employment. An open formula ("and other similar remuneration") argues for a broad interpretation of the concept of remuneration for employment. Income from employment includes not only monetary rewards but all types of benefits such as health or life insurance coverage (Commentary on Article 15 of the MTC OECD, no. 2.1).

The term "salaries, wages and other similar remuneration" may include employee stock options, being in a direct connection with the performance of work duties. It should be distinguished between income resulting from employment, even if benefits have been awarded after termination of employment (article 15 MTC OECD), and capital gains (article 13 of the MTC OECD). Within this scope, according to a statement by MTC OECD income from employment includes profits gained from exercising options, regardless of whether the incentive programme is financed by the employer himself or a third party; i.e. a parent company. However, only benefits attributed to the option itself may be taxed and not those attributed to the subsequent holding of stocks acquired upon the exercise of that option (Commentary on article 15 of the MTC OECD, no. 12-12.15). The income is usually the difference between the market price of shares and the price eventually paid for them upon exercise of options by employees. It should be noted that the income from the options is usually subject to taxation at a different time than the period for which they had been granted. Only those

benefits that are directly related to the performance of work should be qualified as income from employment. There must be a direct economic relationship between the performance of work by a non-resident and the remuneration in the form of employee stock options. It has to be analyzed whether the granting of options is in reward for past services, or rather if it is related with the future, and thus constituting an incentive for employees to achieve specific objectives in the future. In cases of doubt, it should be recognized that employee stock options are generally provided as an incentive for future performance or as an effort by companies to retain valuable employees (Commentary on article 15 of the MTC OECD, no. 12.13; OECD 2004, Cross-border Income Tax Issues, p. 8 and the next). In terms of work performance, the amounts paid out both before and after termination of employment which may be taxed, provided they are directly connected with the work performed there. The currency and location for paying out remuneration do not have any significance (Jamroży, Major 2012, Praca cudzoziemców...., p. 78 and the next).

According to article 15, section 1, sentence 1 of the MTC OECD remuneration received by a resident for employment services shall be generally taxable only in the state of residence of the employee. However, if employment services are performed in a different state, as referred to in article 15, section 1, sentence 2 of the MTC OECD, the received remuneration may be taxed in the state or country where the work is performed. That means that Call Stock Options granted to a non-resident by a Polish enterprise may be taxed in Poland or, in other words, in the country directly connected with the granted options where work is performed. Hence Poland has the right to tax benefits received by a non-resident. However, exercising the right depends exclusively on interpretation of federal regulations. By the acceptance of the prevailing opinion that on the date of granting the options or exercising of the underlying rights on preferential terms no income subject to taxation will be generated. A non-resident being an employee does not bear any tax burden in Poland. At the same time one method for an options beneficiary to use for elimination of double taxation is the tax credit method or the exemption method depending on the solutions accepted in a bilateral agreement.

Additionally, it is worth noting that the financing of the option programme by a company not being an employer but one of the companies being part of the capital group, infers complex problems within transfer pricing. The arm's-length principle requires that transactions between related entities be undertaken at prices and on terms and conditions that would exist between independent entities. In particular the doubts focus on the application of the arm's length principle, the implementation of an appropriate transfer pricing method, especially concerning the compensation benefits as well as the choice of comparables and the other factors considered within the application of these methods(OECD 2004, Employee Stock Option...).

4. Taxation simultaneous with the sale of options

As it has already been pointed to in Chapter 3.1 employees (residents) have benefits received as revenues from capital gains taxed at a rate of 19% (article 17, section 1, point 6 letter a; article 30b, section 1 and section 2, point 1 of the APIT).

In the case of non-residents subsequent profits obtained from stocks received as a result of exercising options, in particular the sale of stocks, are subject to taxation according to regulations of article 13 of the MTC OECD (capital gains) (Commentary on article 15 of the MTC OECD, no. 12.2; Vogel K., Lehner M., Doppelbesteuerungsabkommen..., before articles 6-22, no. 10). As a consequence, gains derived from the transfer of stocks are generally subject to taxation only in the contracting state of which the person transferring is a resident. It is worth noting that some new agreements with countries like Norway and Finland in order to avoid double taxation, based on the contents of article 13, section 4 of the MTC OECD, include the so-called real estate clause. It provides that gains derived by a resident of a contracting state from the transfer of shares deriving more than 50 per cent of their value directly or indirectly from immovable property situated in the other contracting state may be taxed in that other state (here: in Poland). In other agreements with Austria, Belgium, Denmark or Germany the non-precise expression "mainly" has been used (for example "...in the company the property assets of which consist of, mainly directly or indirectly of immovable property..."). In my opinion the notion "mainly" should mean the share of the value of the immovable property in the company assets at the level higher than 50% that is adopting the direction of the interpretation in accordance with the contents of article 13, section 4 of the MTC OECD (Jamroży 2011, Sprzedaż nieruchomości..., p. 5 and the next). At the same time, the share of the value of immovable property must be brought to the company's total assets, without taking into account debts or other obligations, even if these obligations are secured on the immovable property (Commentary on article 15 of the MTC OECD, no. 28.4; interpretation of the Head of the Internal Revenue Chamber in Warsaw of 21st December 2010, IPPB5/423-653/10-4/AJ).

In the case of a change in place of residence by an owner of stocks, bilateral agreements with, for example, Germany and Netherlands guarantee the taxation of the increase in the value of stocks in the state of the hitherto residence of the person changing their place of residence. As the right to tax the gains from the sale of the stocks (not deriving more than 50 per cent of their value from immovable property) depends on the country of residence of the seller, - a change of tax residence would result in the diversion of profits (silent reserves) away from the hitherto tax jurisdiction. One can easily understand particular provisions in

some bilateral agreements such as the one included in article 13, section 6 of the new agreement with Germany: "In the event that an individual was a resident of a Contracting State for a period of at least five years and obtained the place of residence in the other Contracting State, paragraph 5 shall not affect the right of the first state to tax this person under its domestic legislation in respect of any capital appreciation derived from shares in companies established in the first Contracting State up to the date when that person has ceased to be domiciled in that State. If the first of the mentioned States taxes a natural person being a resident there for capital appreciation at the time that person leaves this State, and the ownership of shares is then transferred and the gains from the transfer are taxed in the other State in accordance with section 5, then that other State shall accept as the basis of the evaluation of gains from the alienation the amount, which the first State adopted as the income at the time this natural person was leaving its territory." In the case of difficulties or doubts as to the interpretation or application of the bilateral agreement, there is still a mutual agreement procedure provided for in article 25 of the MTC OECD.

5. Taxation of sold stock options

It is also worth taking a look at an alternative situation when an entitled employee sells the Call Stock Options before the date of exercising the underlying rights. Non-taxation would clearly violate the basic principles of taxation, including the principles of justice and the universality of taxation. Although the granting of stock options provides only a potential opportunity of obtaining benefits in the future, tax revenues are generated at the time of the sale of the granted stock options, even if they are not actually received.

The income from the sale of call stock options is subject to taxation applicable to the source of revenues - capital gains, which is taxed at a rate of 19% (see the position of the Head of the Internal Revenue Chamber in Katowice of 26th March 2008, IBPB2/415-12/08/HS). At the same time it does not matter whether the sale of stock options relates to shares of companies listed on foreign stock exchanges.

In the case of non-residents the gains obtained from the sale of call stock options shall be taxable due to the principles of article 13, section 5 of the MTC OECD that is only in the contracting state of which he is a resident.

6. Conclusions

The current legal status is in question as to the type of revenue options granted to employees constitutes, and at what time these revenues (income) are actually generated. One suggestion is that revenues are generated only

at the time of the sale of these stocks, having been acquired as a result of exercising Call Options, or upon an earlier sale of stock options (provided the agreement concluded with an employer provides for such an alternative). This approach is extremely beneficial to employees, emphasizing employee stock options as an incentive instrument effective for tax purposes. In acquiring stock options or exercising the rights for options, an employee will not pay any income taxes. Only revenues from the sale of stocks acquired within the employee stock option plan should be classified as: capital gains, as referred to in article 17 of the APIT.

Not participating in an employee stock option plan would mean an employee would finance the acquisition of the stocks from after-tax income (from an employment relationship). One reservation to the whole process is that tax organs still often present a very different picture in terms of which revenues are generated from incentive plans simultaneously with acquiring the stocks and which constitute employment related revenues or revenues from other sources, depending on who finances such a programme.

In an international context these tax issues may intensify particularly when, under laws governing different countries or states revenues resulting from the participation in employee stock option plans are categorized differently and at various rates. As a result of these variances, conflicts surrounding the question of double taxation, tax avoidance and low-level taxation may continue.

References

- 1. Felis P., Jamroży M., Szlęzak-Matusewicz J., *Podatki i składki w działalności przedsiębiorców*, Difin, Warszawa 2010.
- 2. Jamroży M., *Sprzedaż nieruchomości w świetle umów o unikaniu podwójnego opodatkowania kilka uwag o sprawach kontrowersyjnych*, Przegląd Podatkowy no. 12/2011, pp. 6-8.
- Jamroży M., Spotowska M., Opodatkowanie opcji pracowniczych linia orzecznicza, Vademecum Doradcy Podatkowego (e-publication), Wolters Kluwer Polska 2011.
- 4. Jamroży M. (red.), Major T. (red.), Pawłowska B., Spotowska M., *Praca cudzoziemców w Polsce. Aspekty prawne, podatkowe i ubezpieczeniowe*, ODDK, Gdańsk 2012.
- 5. OECD, Employee Stock Option Plans: Impact on Transfer Pricing, 2004.
- 6. OECD, Cross-border Income Tax Issues Arising from Employee Stock Option Plans, 2004.

7. Vogel K., Lehner M., Doppelbesteuerungsabkommen der Bundesrepublik Deutschland auf dem Gebiet der Steuern vom Einkommen und Vermögen. Kommentar auf der Grundlage der Musterabkommen, C.H. Beck, München 2008.

Krystian Barłożewski*

EFFECTIVENESS OF MARKET STRATEGY FOR MANAGEMENT OF BRAND PORTFOLIO CONSISTING OF INNOVATIVE DRUGS AND THEIR GENERIC EQUIVALENTS

Abstract

Empirical evidence implies that soon after patent expiration generic competitors enter the market with their usually cheaper substitutes of the original drugs. For a long time previously innovative companies primarily had lost their interest in the off-patent drugs and had focused their attention entirely on promotion of new innovative drugs (new chemical entities - NCE) which only had just been approved for manufacturing and selling. However over recent years the number of newly introduced innovative drugs has been decreasing, which in turn has led to growing market competition.

Currently a different approach may be observed as innovator pharmaceutical companies strive to maintain a strong competitive market position even following expiration of the drug's patent. However, they try to avoid strengthening their market edge based solely on price. Such an approach would inevitably lead to significant loss in sales and a fall in product margins. It is for that reason that some innovator companies decide to enter the market with a one or more 'generic' versions of their original drugs, ie. to implement a brand portfolio strategy on a single chemical entity market.

This paper examines the results of such strategies adopted in the Rx (prescription medicines) markets including analysis of reasons for failure and success. As it stems from research completed, the brand portfolio strategy is very popular in some developed pharmaceutical markets and very often brings significant financial benefits to innovator companies. In case of the strongly regulated Rx pharmaceutical market in Poland, very different results have been observed – this kind of strategy displays weaker popularity and relatively seldom brings intended effects to the patent holders.

Key words: generic drugs, pharmaceuticals, competition, strategy.

^{*} M.Sc. in Economics, PhD student, Collegium of Management and Finance, Warsaw School of Economics.

1. Introduction

Just a few years ago it was common for big innovator pharmaceutical companies to limit substantially active sales promotion activities for a drug which had just lost its patent exclusivity. That was linked with redirecting of the vast majority of resources in order to introduce a new innovative product (a new chemical entity). The primary beneficiaries of that approach were mainly generic competitors which used to enter the market promptly after patent expiry with cheaper versions of branded drugs. However the market has changed significantly over the recent years as it has turned out that the pipeline of innovative drugs has been steadily declining and the existing original brands have begun to loose their market exclusivity one after the other. This in turn has led to increased competition and desire to maintain the pre-patent expiration sales volumes and values. As a consequence innovative companies have started to become more interested in the generic drug market – both for their own NCEs and NCEs introduced by other innovative companies. Especially interesting is the case where a pharmaceutical company, upon expiry of its patent, takes a decision to license another brand with the same chemical entity but marketed as a generic. Subsequently they create a portfolio of different trade marks which, from a legal perspective, are considered to be fully therapeutic equivalents, ie, proved to have the same efficacy, purity and stability with the only difference being trade mark, packaging and price.

Sifting through papers written in English describing the market of pharmaceutical drugs, it was hard to find a uniform definition for this kind of market strategy. Subsequently generic drugs produced by patent holders are defined as "pseudo-generics" [Hollis 2005, p. 329], "authorized generic drugs" [Lamb 2008], "branded generics" [Singer 2010], "second brand" or "dual brand". It should be, however, noted that particular definitions depending upon the author – often have different meanings. As an example the term "branded generics" may be appropriate here as it is used to refer to both generic versions introduced by patent holders for their own branded drugs and generics produced by other competing companies [Reiffen 2005, p. 1-2]. Some authors indicate that commonly used terminology was developed by IMS Health in 2002. This separates meanings for the following terms: "authorized generics" and "branded generics". The latter term is defined as products that are either novel dosage forms of off-patent products produced by a manufacturer that is not the originator of the molecule, or a molecule copy of an off-patent product with a trade name. On the other hand "authorized generics" refer to drugs made by or under license from the innovator company and sold without a brand name [Lamb, op.cit].

At meetings with representatives of pharmaceutical companies – at least in Poland – it was pointed out that the most frequently used term is "second brand". Thus I will be also using that term in this paper – alternately with the term "brand portfolio" – especially as it will also refer to the next versions launched for the same chemical entity by the same company.

It happens that a single generic company introduces more than one generic version marketed as different trademarks, eg. Amlozek and Amlonor – the chemical entity is amlodipinum – manufactured and sold by Adamed, a Polish pharmaceutical company. In this case after several years following patent expiry of Norvasc and lack of active promotion among physicians and pharmacists, Adamed was able not only to gain a dominant market position but also to convince market players that Amlozek is the genuine and innovative brand. Hence Amlonor is marketed as a generic for Amlozek and subsequently directed to a separate customer segment.

As has already been mentioned, the main competitive advantage of generics is their lower price compared to original products. The main objectives set out for such a strategy might include:

- Preserving pre-patent expiration market share and creating entry barriers for new entrants;
- Creating the impression at least in the eyes of patients and pharmacists of a strong market competitive edge and further reducing the capability of other potential generic entrants to compete effectively;
- Entering into new markets by acquiring approval to dispense a product without prescriptions, eg. Urofuraginum and Furaginum marketed by Adamed.

This paper examines the effectiveness of the 'second brand' strategy in the Polish pharmaceutical market, where companies compete directly against generic firms by introducing a generic version for their own original brands. These results will subsequently be compared to those in more developed West-European markets.

For innovative companies present in the Polish market this is often a completely new area where the risk of sales cannibalization of original brand by its cheaper generic version is considerably high. Hence they need to face the possibility of losses in total sales and margins. Based on observations and meetings with employees from the pharmaceutical sector, an attempt will be made to indicate the reasons for failures and successes stemming form this kind of market strategy approach.

2. Strategy of brand portfolio with "own generics" on foreign markets

It is alleged in literature that the first attempts to introduce a 'second brand' strategy by large drug companies were made in the early 1990s [Reiffen, op.cit., p. 3]. It was also reported and can be observed in the market that over the past several years that this strategy has become more and more popular. This has occurred for several reasons:

- Low potential for sales growth in developed Western markets;
- Patent expiration for key products and subsequent entry of new substitute drugs resulting in diminished sales and market share for the originator company and a subsequent desire to develop effective defense strategies to reduce competition from generic producers [Bates 2011];
- Disappointing results in the channeling of new chemical NCEs which show no evidence of success for future blockbusters such as Pfizer's Lipitor (in Poland marketed as Sortis) or Viagra;
- A necessity to expand markets for further growth by entry into emerging markets, ie. Eastern Europe, Asia and Latin America. With a relatively low average disposable income per capita patients in those regions cannot afford original and expensive brand-name drugs [Singer, op.cit.];
- Additionally there is a significant risk of counterfeit drugs in some countries. Hence cheaper generic alternatives introduced by well known and recognized companies might enjoy increased popularity.

As a result, some drug companies in emerging markets offer original drugs at higher prices to wealthy consumers as well as generic versions of branded products (their own and other innovative companies) at a significantly lower price to other patients with lower income. This segment makes up a sizeable majority of the whole population. The Pfizer company serves as one example as it signed an agreement with the Indiabased generic manufacturer, Aurobindo; Sanofi-Aventis which purchased Zentiva, a leading Czech pharmaceutical company; Novartis which markets its generic drugs under a separate brand and entity, Sandoz [Singer, op.cit.].

By observing the pharmaceutical market conclusions can be drawn that for the last few years this has been the upward trend and the generic market has become an attractive strategic alternative for a lot of large pharmaceutical innovative companies. It has been alleged by industry experts that in the longer-term the expansion into emerging markets is crucial for maintaining prospects for further growth in sales [Boswell 2009].

It is interesting that for some drug companies the generic strategy seems to be particularly profitable in the Polish market – also highlighted as a market where it is relatively easy to implement such a two-tiered strategic approach [Senior 2010].

Potential benefits stemming from launching generic substitutes for its own innovative brands are perceived as the opportunity to maintain market shares in the longer term (defense strategy), forcing competitors to leave the particular NCE's (active molecule) market or simply deciding against entering the market (offensive strategy) and sometimes an improvement in sales figures (strategy of leveraging occurring market opportunities).

Additional advantages over an independent generic producer weighting in favor of such a strategy include [Reiffen, op.cit., p. 10-14]:

- Experience in manufacturing and following lower production costs resulting from 'learning curve' effect;
- As long as the new generic version is manufactured on the same production lines, the originator does not need to conduct additional research studies to prove bio-equivalence and file for an approval to introduce the generic version on the market; this in turn allows not only for cost savings but also enables launching of new products as soon as they receive approval;
- There are no legal constraints to introduce the generic version at the preferred time, even before patent expiration.

Some analysts have noted that introducing a substitute for its own brand by a patent holder deters generic competition by delaying new entrants or forcing independent generic firms to resign from the market. Ward and Reifen calculated that the 'second brand' strategy reduces the number of independent generic companies present in the market by 1.7 to 2.4 [Ibidem].

It is also very difficult for the remaining firms in the market to gain the highest level of market share possible should the 'second brand' strategy not be implemented by the patent holder of the original drug [Hollis 2002, p. 723-724].

It is commonly recognized that the best results of the 'second brand' strategy are obtained if the generic version is introduced into the market in advance of any other competitor; ie. just prior to loss of market exclusivity [Hollis 2002, p. 728-733].

Analysis of developed Western markets including Canada indicates that the 'second brand' strategy has proven to be very effective in obtaining an increased market share. In 1999 substitutes manufactured by innovative companies for their own branded drugs had 34.6% of the generic market [Hollis 2003, p. 24] and were present in almost every NCE market of non-patented products [Hollis 2005, p. 329-332].

This figure should not be surprising in the light of other research indicating that the higher market share of generic product leads to higher prices of both branded drug and its generic version when the 'second brand' approach is applied [Hollis 2005, p. 348-349].

This stems from the fact that the original brand is often perceived by a lot of patients as more efficacious, of better quality and safer. Thus it is the preferred choice even if more expensive.

In the case of 'own generic', its origin of well-known branded manufacturer is a sign of authenticity, high quality and safety. It cannot be, however, forgotten that in the case of the generic drug segment there is a particular price-demand elasticity.

The results of the research conducted by Hollis indicated additionally that the first substitute in the generic market may expect to capture a higher market share of between 20% and 35% compared to other entrants simply by being first in the market [Hollis 2002, p. 723].

It seems, however, that large pharmaceutical firms, which have lost patents for their blockbuster products, do indeed share this very perspective and have started aggressively promoting their own generic versions of brand name products; eg. in November 2011 Pfizer launched a generic version for its best-selling drug ever "Lipitor" (in Poland marketed as "Sortis") in the USA, which by the end of 2011 obtained ca. 14.6% of the market share [Rubin 2011].

After several meetings with pharmacists the author of this paper has come to the conclusion that the major reason for the dominance of the first generic entrants in the marketplace seems to be cost switching linked to using alternative drugs, particularly if the first ones are already well tolerated and financially affordable for patients. Another reason is the time required by pharmacists to convince and encourage patients to switch to new drugs and the risk encurred of putting relationships with local physicians at stake who often react adversely when their prescribed therapy is changed by a pharmacist.

This point of view is also present and shared by other analysts [Daly 2007, p. 10]. After a few months since the new reimbursement law took effect in Poland, it is also worth noticing that there are growing fears linked to prescription switching of reimbursed drugs. Pharmacists do often prefer not to switch prescriptions as they are afraid of being fined by NHF (National Health Fund).

Taking all these issues into consideration it is not surprising that innovative drug companies are willing to take the risk of diminished sales of original drugs at the hands of newly introduced cheaper generic alternatives and the anticipated long-term synergy effects and deterred

market competition. Other research conducted by Ward and Reiffen show that in larger markets, profits of companies in the generic segment are more than twice as large as sales figures of innovative drugs [Reiffen, op.cit., p. 24-26].

Despite obvious benefits of the 'second brand' strategy, some authors warn that caution should be exercised as over the long term the currently introduced generic substitutes may require considerably more effort and attention to maintain satisfactory sales levels. It should be also noted that margins of those products are low compared to innovative drugs [DePalma 2011].

It will be a big challenge for innovative firms to popularize newly introduced generics and ensure that they fulfill unmet medical needs as the pharmaceutical market is not always price- related and companies are constantly seeking to optimize returns [Kanavas, Costa-Font, Seeley 2008, p.536].

Introducing a changed (different number of tablets, changed tablets size/shape) or a new dosage form may be required in order to differentiate substitutes from originals. A new dosage form may be a crucial part of such strategy and may involve ODT (orally disintegrating tablets), modified release tablets designed to release active ingredients slowly, thin films, aerosols, transdermal patches and many others. Market evidence indicates that such attempts are being made more and more often; eg. Cardura XL (modified release tablets which are very difficult to produce, in turn creating an entry barrier for potentially new generic drugs) or ODT tablets; eg. Aricept ODT. Based on the research conducted by Sullivan (1992) one can conclude that increasing brand choice – as mentioned above – is more beneficial when products are introduced later than products marketed under a completely new brand names (such as generic versions of own innovative drugs no longer protected by patents) [Sullivan 1992, p. 793-806].

The author of this paper takes the view that effective introduction of a new generic alternative for own original brand will be inevitably linked with the necessity to develop and implement a robust differentiation strategy for both products in order to target defined segments of patients and subsequently to mitigate cannibalization of sales.

3. Popularity and effectiveness of the 'Second Brand' strategy in the Polish pharmaceutical market

The study presented in this paper was conducted on the basis of 33 chosen drug manufacturers currently present in the Polish market. Product portfolios offered by those companies were examined in order to find those markets (understood as a single chemical NCE), where the 'Second Brand' strategy has been deployed.

The following cases were not taken into consideration prior to making generalizations:

- There was an acquisition or merger of a company which had an analogue product (with the same active ingredient) in its offer and currently they are marketed independently;
- A company combined already marketed products with new or other already existing chemical entities (NCEs), eg. Pfizer's Xalacom (latanoprostum + timololum);
- The same chemical entity is promoted in different indications and marketed under separate tradenames, eg. Viagra and Revatio;
- The same chemical entity is distributed in different dosage forms, eg. aerosol, spray or cream and marketed under separate tradenames;
- After giving some thought on sample population one instance has been excluded where a drug company launched two products at the same time with the same chemical entity, the same medical indication however promoted under different brands. The rationale for this is a lack of comparative data to examine impact of such a strategy on capturing market share.

An analysis of the Polish prescription drugs market shows that the 'Second Brand' strategy does not enjoy popularity and only a few companies have decided to deploy it in more than one market understood as an active ingredient (see table 1).

Table 1. Frequency of 'second brand' strategy presence in the Polish prescription drugs market

Deployed strategy	No of markets (market = NCE)	No of firms
'Second brand'	17	10
One NCE – one brand	415	19
TOTAL	432	29

Source: Analysis of product portfolios offered by selected 33 drug manufacturers.

After review of product portfolios of 29 large pharmaceutical companies offering prescription drugs it was found that only 10 of them deployed the 'second brand' strategy (in total for 17 chemical entities – NCE's). Only three of those companies decided to use it more than in one instance. This demonstrates a clearly conservative approach which certainly is linked with a high risk of sales cannibalization, at least during the first few months.

It is worth mentioning that during the analysis study it was quite surprising to find the 'brand extension' approach enjoying much more popularity than the

'second brand' strategy. Here, two or more active ingredients are combined together and subsequently marketed under a one tradename. The most likely reasons for that might be that by adopting such a strategy and simultaneously assigning large resources for promotion among physicians, a company may be able to reduce substitution much more effectively and convince physicians on the advantage of choosing its brands over competitors, (eg. a patient needs to take only one drug, not two, thus increasing compliance and reducing overall cost of treatment).

An analysis of the potential and likely objectives behind 'second brand' strategies adopted in the Polish prescription market enables us to come to the conclusion that it is rare for companies to create an impression of a 'crowded market' by introducing a few brands with the same active ingredient. Only in three instances could it be alleged that such a strategy was implemented. This seems to be fully understandable in the light of difficulties usually encountered in the management of multiple brand portfolios in a homogonous market. This in turn results from limitations in using marketing-mix instruments not allowing for implementation of more aggressive, more effective brand differentiation strategies.

The next step in the process of review of 'second brand' strategy effectiveness was to examine how total sales and market shares of the original and its generic version changed after deployment of the 'second brand' strategy. However only those cases were verified where the substitute was present in the market for at least a year. The results of the study are presented in the Table 2. They indicate that a success – measured as an increase of total market share in the long term – was found only in a third part of all cases.

In principle the changes in sales volumes went hand in hand with changes in sales value. However it was observed in one instance that the increase in sales value was higher than the increase in sales volume. This could be explained by progressing price erosion resulting from growing competition in that particular market (atorvastatin) in the recent years.

The evidence collected during the research (see Table 2) indicates that introduction of a second or further brand with the same chemical entity into the market does not ensure achievement of sales objectives and in most cases it will end with drop in market share both in sales volumes and value.

Further study of particular cases leads to the conclusion that applying such a strategy requires enormous skill and competence in the area of brand portfolio management, adequate positioning strategy for both products reflecting the market situation as well as challenges of a given market, targeting a precisely and cautiously defined consumer segment.

Table 2. Efficacy of 'second brand' strategies in the Polish prescription drug market

Quantitative analysis			
Change in market share	Volume	Value	
Increase	6	7	
Decline	11	10	
TOTAL	17	17	

Percentage analysis			
Change in market share	Volume	Value	
Increase	35%	41%	
Decline	65%	59%	
TOTAL	100%	100%	

Source: Based on sales data reported by selected drug manufacturers.

In the alternative case it is likely that sales cannibalization will occur and will not be offset by incremental sales of its generic version. One particular example is Polpharma which decided to introduce a much cheaper version of Maxigra, a very popular drug (market leader) for erectile dysfunction in the Polish market. The second brand was introduced shortly after new generic alternatives were launched by independent competitors which subsequently began to increase their market share at the expense of Maxigra. It seems probable that Polpharma decided upon introducing the cheapest generic alternative, Sildenafil Medana into the market in order to 'push out' competition. The price of the new product was only 1/3 of Maxigra and ½ of other generics (it must be, however, noted that Medana is related to Polpharma). The competitors had relatively small market shares and consequently the new brand began to obtain more market share at the expense of the market leader, Maxigra.

If it was assumed that the major objective to launching a new generic version was to reduce the number of competitors and to build a strong entry barrier deterring or delaying new entrants, it must be stated that this approach failed. There were new large, global pharmaceutical companies which offered other generic alternatives at prices even lower than Medana. Finally a price war started which led to a drop in average product margins and resulted in almost a complete lack of difference in brand perception in terms of quality, efficacy and safety. It seems that much better effects could be achieved if an adequate differentiation strategy for the market leader was developed prior to deployment of the 'second brand' strategy. That would enable a building

of strong brand awareness of Maxigra and maintain loyalty to the product by physicians, pharmacists and patients. It can be argued that only then introducing a generic alternative would not result in sales cannibalization and a drop in sales figures to the extent noted.

Other instances of 'second brand' strategy implementation were also examined and subsequently were split into two separate groups – the first with all cases considered achieving success, ie. achieved additional market share while the other group ended up with a decline in market share. Subsequently an average change in market share was calculated for each of the groups. The results of the study are presented in Table 3.

They indicate that in the case of failure the average decline in market share was twice as large as in the case of success in implementing the strategy. Evidence from research indicates that the average expected result from deployment of the 'second brand' strategy is a small percentage decline in total market share of both products.

Table 3. Effectiveness of 'second brand' strategies in the Polish prescription drug market

Average change in market share			
Final result of 'second brand' strategy deployment	Sales volume (pp)	Sales value (pp)	
Increase	4,8%	4,4%	
Decline	-10,0%	-9,2%	
TOTAL	-4,8%	-3,6%	

Source: Based on sales data reported by selected drug manufacturers.

The above results indicate that the companies which decided to implement such a market strategy faced difficulties in defining an optimized set of marketing-mix tools which would enable the company to achieve certain business objectives.

The selected sample is not sufficient to perform a reliable regression analysis. However, based on examination of particular instances and further discussions with representatives of the pharmaceutical industry, indications are that a few factors might be responsible for the current low effectiveness of the 'second brand' strategy. These are:

 Highly homogeneous market of prescription drugs – the Ministry of Health actively promotes its view that "innovative drugs and their generic versions are bio-equivalent; ie. have essentially the same efficacy and safety levels and the only differences between them are the inactive ingredients which do not have any therapeutic impact.

- Additionally under the new regulations stemming from the new Reimbursement Act (which took effect from the 1st January, 2012) pharmacists are obliged to inform patients on availability of cheaper generic alternatives;
- Legal restrictions literally prohibiting the promotion of all prescription drugs among patients. This in turn limits possibilities to communicate effectively with a defined customer segments and subsequently to apply a product differentiation and positioning strategy in order to keep ahead of competitors;
- Using price as the main tool to differentiate products Under provisions of the New Reimbursement Act any incentives offered with regard to reimbursed products are prohibited (this includes also any discounts and rebates). The prohibition should be respected by manufacturers, wholesalers, pharmacists and any other market participants. In practice, this means introducing fixed prices and margins for reimbursed open-market drugs;
- Taking into consideration a low level of average retail price in a particular NCE market, drug switching costs for patients and additional time required for pharmacy consultations with patients (necessary for effective switching) significantly outweigh potential benefits from retail price reduction through additional discounts;
- Lack of easily identifiable customer segments, especially where an average retail price is relatively low; ie. below 15 Polish Zloty. In effect, any attempts to differentiate products through price management would be condemned to failure because in that price segment any price differences would have little or no importance for patients, pharmacists and physicians;
- Lack of or in-coherent marketing promotion directed at physicians and pharmacists used to position in the market two or more trade brands – in consequence sales cannibalization or no interest in the new products is likely to occur;
- Intense competition in the market which makes difficult to differentiate and drowns out promotional activity relating to newly introduced products. It also creates impediments that deter other companies from entering the market; eg. by price reductions and building high stocks levels in distribution chains.
- -• Too large a price difference between products disallowing for the compensation of a drop in sales figures resulting from brand cannibalization, particularly if the already existing brand is the market leader with a large market share;

• Poorly developed service-related mechanisms are banned under the new law that are legally allowable to influence patients' and pharmacists' purchase behaviors as the commonly used price-related incentives regarding reimbursed products. These legally prohibited incentives include discounts, value and distribution rebates, invoices for any kind of marketing services; ie. purchase of sell-out data, rental agreements regarding promotional space, fees for providing promotional and informational materials to pharmacy employees responsible for dispensing pharmaceuticals, etc.).

The provisions of the new Reimbursement Law reduced significantly the range of allowable marketing tools that can be used to increase firms' competitiveness. Taking this into consideration a conclusion may be drawn that deployment of a 'second brand' strategy will be even more difficult than before and potentially be limited only to non-reimbursed and OTC drugs since only in those markets will there be any possibilities to develop promotional schemes; ie. to create and promote proposals tailor-designed to specific segments of pharmacists and patients.

In future it might be expected that drug manufacturers will be more interested in developing other forms of promotional and trade mechanisms which are more difficult to design and implement. These are defined as value added services and they may cover pharmaceutical healthcare programs directed to patients, awareness campaigns relating to a selected disease, pharmacy sell-out programs regarding non-reimbursed and OTC drugs, new dosage forms and other. In case of relatively expensive innovative drugs it is likely that this approach will allow for effective deployment of differentiation and positioning strategy and this in turn will enable the pharmaceutical company to mitigate the key risks and adverse effects of sales cannibalization when introducing a cheaper generic version into the market.

4. Conclusions

In the light of a decreasing number of new innovative drugs introduced into the market it is tempting to assume that applying the concept of brand portfolio management in the form of a 'second brand' strategy will bring a considerable sales and market share increase. In some countries it has become almost a binding market principle which is applied soon after patent expiration. It is crucial not only to take a well-thought-out decision whether to launch a generic version of the branded drug but also to be first in the market and capture dominant position against other competitors.

The analysis of 'second brand' strategy effectiveness provided evidence that it rarely contributes to the achievement of anticipated business and financial goals in the Polish market and often leads to decline in total market share of both products. This results mainly from unfavorable legal provisions which strongly limits the range of allowable marketing tools, hence hinders their selection and combination in such a manner that would enable the company to achieve determined business objectives. This also explains relatively small number of instances where such a strategy was found.

The new Reimbursement Act provided additionally further legal restrictions and sanctions thus reducing the range of allowable business practices relating to drug manufacturers, wholesalers, pharmacists and other market participants. The new law also introduced fixed prices and margins for reimbursed drugs (in practice there are no legal possibilities to compete by developing discounting schemes in open market). The pharmacists are also under a new obligation to inform patients on availability of cheaper generic alternatives for reimbursed drugs.

It creates further impediments to deploy effectively strategy of brand portfolio management in a particular chemical entity (NCE) market. Hence it is rational to expect that this kind of market strategy would be less often applied in practice than before.

Currently it seems that drug manufacturers will focus much more attention on developing and adopting differentiation strategy for already existing products. The following will serve to achieve this objective:

- Linking brands with additional promotional activities; eg. more frequent visits to physicians by medical representatives, direct promotion, advertising and sales to pharmacies);
- Utilizing firm's know-how to develop services dedicated to patients
 and pharmacists (known as value added services), including
 programs of pharmaceutical healthcare for patients, strengthening
 relationships within the triangle physician-pharmacist-patient, disease
 awareness campaigns (eg. erectile dysfunction awareness campaign
 implemented by Pfizer in selected pharmacies in Poland), patient
 drug persistence and adherence support services, activities intended
 to build pharmacists' loyalty (trainings on how to perform a financial
 analysis of pharmacy, how to discuss about switching with patients,
 etc).
- Long-term development of corporate brand image to differentiate from other drug manufacturers as a producer of high quality products confirmed by medical studies in contrary to generic companies which have very limited possibility to do so.

It must be however noted that only in a few cases the 'second brand' strategy enabled the adopting company to achieve increase in total sales value.

This study highlights further areas for research including how the extent and methods of differentiation of brands, promoting, pricing and other marketing tools impacted the overall effectiveness of the applied strategy. This could help to define the best market practices and to indicate substantial mistakes to be avoided in future deployments.

References

- 1. Bates A., *How to mount an effective defense against generics*, "eyeforpharma", February 14, 2011, accessed May 22, 2012, http://social.eyeforpharma.com/marketing/dr-bates-talkback-how-mount-effective-defense-against-generics
- Boswell C., Pharma enters emerging markets via generics, ICIS Corporation, October 7, 2009, accessed May 22, 2012, http://www.icis.com/Articles/2009/10/12/9253207/pharma-enters-emerging-markets-via-generics.html
- 3. Daly C., *Are branded generics still a cost-saving option?*, "Prescriber", 2007, vol. 18, issue 6, p. 10.
- 4. DePalma A., *Branded generics: The emerging opportunity*, "*eyeforpharma*", July 5, 2011, accessed May 25, 2012, http://social. eyeforpharma.com/marketing/branded-generics-emerging-market-opportunity.
- 5. Hollis A., *How do Brands' "Own generics" Affect Pharmaceutical Prices*, "Review of Industrial Organization", 2005, vol. 27, p. 329.
- 6. Hollis A., *The anti-competitive effects brand-controlled "Pseudo-generics" in the Canadian pharmacutical market*, "Canadian Public Policy Analyse de Politiques", 2003, vol. 29, issue 1, p. 24.
- 7. Hollis A., *The importance of being first: evidence from Canadian generic pharmaceuticals*, "Health Economics", 2002, vol. 11, p. 723–724.
- 8. Kanavas P., Costa-Font J., Seeley E., *Competion in off-patent drug markets: Issues, regulations and evidence*, "Economic Policy", 2008, vol. 23, issue 07, p. 536.
- 9. Lamb, *Branded Generics: Misunderstood but lucrative*, "PharmacyTimes", October 7, 2008, accessed May 20, 2012, http://www.pharmacytimes.com/publications/issue/2008/2008-10/2008-10-8707
- 10. Reiffen D., Ward M., "Branded-generics" as a strategy to limit cannibalization of pharmaceutical markets, in Working Papers, vol. 0502, p.1-2, Arlington: University of Texas at Arlington, 2005.

- 11. Rubin A., "*Branded" Generic Drugs*, www.therubins.com, December 17, 2011, accessed May 15, 2012, http://www.therubins.com/legal/branded.htm
- 12. Senior M., AstraZeneca Outlines Branded Generics Strategy at Emerging Markets Event, "EuroPharmaToday", March 17 2010, accessed May 22, 2012, http://www.europharmatoday.com/2010/03/astrazeneca-outlines-branded-generics-strategy-at-emerging-markets-event-.html
- 13. Singer N., *Drug Firms Apply Brand to Generics*, "The New York Times", February 16, 2010, accessed May 21, 2012, http://www.nytimes.com/2010/02/16/business/16generic.html.
- 14. Sullivan M., *Brand Extensions: When to Use Them*, "Management Science", 1992, vol. 38, issue 6, p. 793-806.

IV. BUSINESS AND NON-PROFIT ORGANIZATIONS – GLOBAL AND REGIONAL ASPECTS

Jacek Małysko*

LOCAL COMMUNE ADMINISTRATION AS A REGULATOR OF THE LOCAL WATER SUPPLY AND SEWAGE DISPOSAL SERVICES MARKET

Abstract

In this article the author discusses problems related to the regulation of water and sewage disposal services market. In the beginning he describes the processes of water supply and sewage disposal taken by the local commune administration as a natural monopoly. Next he characterizes the structure of this market in Poland. Then he presents the role of local commune administration as a regulator. The author concludes by evaluating the existing Polish system of regulating water supply and sewage disposal services.

Key words: public services, monopoly, regulation, infrastructure.

1. Introduction

Local authorities are responsible for providing public services such as: sewage disposal and supplying water to households. These are their legal duties. The provision of water and sewage services is based on a natural monopoly. In theory, a company which is a monopolist produces goods cheaper. In practice, though, it doesn't necessarily mean that they sell cheaper. Due to the lack of competitors in the market there is a risk that the price of goods or services sold by a monopolist exceeds significantly their original costs. Competition forces companies to cut prices. With no competition in the market, monopolists can claim unreasonably high levels of expenditures. Numbers in terms of this type of abuse are difficult to estimate. Therefore, public authorities should regulate the monopolistic market in order to protect consumers.

The aim of the article is to analyze the range of tasks assigned to local commune administration as a regulator and the tools available for them in order to carry out those tasks. Moreover, the article evaluates if the existing Polish legal environment stands up to the standards required to carry out these

^{*} Ph.D., University of Rzeszów.

regulatory tasks successfully. It is a vital issue as the actions of regulators don't only protect consumers but prevent public service receivers from claiming excessive costs. Whether a regulator is effective or not has an effect on the process of introducing free market rules into the water and sewage sector. If a regulator isn't strong enough, the privatization of communal enterprises makes no sense because a public monopoly is replaced by a private one. Economic stimuli connected with the process of introducing free market rules wither and die.

2. The market of water supply and sewage disposal services as a natural monopoly

A natural monopoly is said to exist in two situations. In the first case the natural monopoly operates on such a scale as to justify the existence of only one firm in the market [Stiglitz, 2004: 223]. In the second case the natural monopoly stems from a limited access to rare goods [Baehr, Stawicki, Antczak, 2003:18].

Public services such as supplying water to households and sewage disposal are provided using transmission and distribution networks. The technical infrastructure is a basic component of water-supply-and-sewage enterprises. They cannot perform their own tasks without the existence and proper maintenance of this infrastructure. This water supply and sewage disposal infrastructure is characterized by its longevity as well as its persistent and technically indivisibility. This last feature signifies that the infrastructure has to be built in such a way that it exceeds the current demand for services and takes into consideration future demand [Dziembowski,1983:30]. These aspects mentioned above hinder the water supply and sewage disposal infrastructure, not allowing it to function efficiently, and in particular in the first stage of its usage.

The supply of water and sewage disposal needs to be constant as it is deemed a necessary service. The process of providing services has the following stages: first services are sold and then they are produced while at the same time they are used by consumers [Marketing..., 2003:36]. It is technically impossible to organize water and sewage services in advance.

In addition, water supply and sewage disposal enterprises need to have a reserve of production capacity. This is due to the fact that different groups of people have different degrees of demand for water supply and sewage disposal at particular hours of the day and on particular days of the year. [Dziembowski, 1983:29] Therefore the production capacity of water supply and sewage disposal enterprises has to cover the demand which tends to be higher than average.

The technical features of providing services and investment processes mentioned above have economic consequences. They involve the high capital absorption of facilities (mostly water mains and sewer systems) in relation to results. The percentage of permanent costs in the terms of total operating costs is significant. If the production capacity of the infrastructure increases, permanent costs will decrease.

Characteristics of the water supply and sewage sector indicate that it is based mostly on the first type of natural monopoly. Advantages of operating on a high scale as mentioned above bring advantages in production, range and transmission, which are all the features of a natural monopoly [Sadowy, 2010:9].

If a firm extends production, its costs for the manufactured goods will be reduced. In this case we can talk about the advantages of the high scale of production. In water supply and sewage disposal the costs of produced and provided services include mainly the costs of water mains and the sewer system maintenance. If these facilities already exist, the cost of providing services to the next receiver will be comparably lower.

A company could provide services to many kinds of consumers. Their demands for services are discrepant because of their various lifestyles and jobs. The imbalance in demand for services permits better utilization of facilities.

Advantages of transmission appears when a provider of water and sewage services uses only one water main and only one sewer system. The duplication of these devices causes transmission costs to increase. Such circumstances influence the cost of provided services with the usage of a network. In this situation the cost of provided services is lower when one firm operates on the market.

M. E. Porter's model of the market is very useful in explaining rules of a water supply and sewage services market. This model is used to analyze the risks and profitability of a company's performance on the market and consists of five elements: suppliers, competitors, receivers, substitutes and barriers to new companies [Porter 2000:22].

It is not important for a provider what kind of activities a supplier of products takes because all stages of water and sewage services are usually carried out by the same company. Besides water and sewage transmissions are expensive. Therefore the usage of one water main and one sewer system by more than one company isn't cost-effective. [Kopańska, Bartczak, Siwińska-Gorzelak 2004:114]. That is why this solution shouldn't be opted for.

There are no competitors in the water and sewage services market because the activities of only one company in this market is economically reasonable. Due to the lack of a substitute for water the threat of finding a replacement doesn't exist.

Consumers of water and sewage services are in a worse position than providers because there is no competition and or substitutes.

Market entrance barriers are connected with the possibility of the appearance of a potential competitor on the market. High investment costs are the obstacle to entering a water and sewage services market and only exist when there are no water mains or sewer system. In this case these devices already exist and there are no economic reasons to double them up. Therefore the possibility of the appearance of a potential competitor on the water and sewage services market is improbable.

Technical and economic development stems from the fact that elements such as suppliers, competitors, receivers, substitutes and barriers for new companies exist in this competitive market. The water and sewage services market is a monopoly. Therefore these rules don't apply here.

3. The structure of the local market of water supply and sewage disposal services

Water supply and sewage disposal activities are the assignments of a local commune administration. Local authorities have to guarantee the constant providing of public services, such as a quality water supply and sewage disposal to the local population. These public services include the collection of water, purification of water, water distribution, sewage disposal and sewage purification. Local commune administration is able to assign these tasks mentioned to one firm or divide them between two or more enterprises.

Public services provisions are just that, to serve the public. Public authorities are always responsible for their efficient functioning. They have the right to choose a public services provider. They might do that in different ways: They may set up their own units or subcontract the work to outside suppliers.

In the first case local authorities might establish their own units in the form of legal enterprises. These units might be one person or not [Komentarz...2007:155]. Local authorities might set up companies and maintain full ownership. Companies such as limited liability companies and joint-stock companies are legal entities. A local commune is capable of establishing organizations which aren't legal entities. [Miszczuk, Miszczuk, Żuk 2007:124]. These units, such as a budgetary unit or a budgetary institution are a part of a local commune administration. Local authorities might also set up other units such as limited partnerships or limited joint-stock partnerships. These partnerships can be established in order to enable the forming of a public-private partnership agreement.

In the second case local commune administration might subcontract the provision of public services to outside private suppliers. Local authorities may invite a public tender for the provision of water and sewage services. Then they adjudicate the tender and choose the best supplier. The firm would provide water and sewage services for the commune population using public infrastructure. Local authorities may also cooperate with a private firm establishing a public-private partnership. Public authorities and the private partner sign an agreement in which they divide responsibility for the provision of water and sewage services among other responsibilities. The public-private partnership creates a network structure in public administration. Networks are created by independent (in a legal sense) organizations which cooperate to not only achieve individual aims but also common aims. They are established around the process but not around institutions or power centers. Networks consist of nodes and ties [Bielski 2002:150]. Network nodes are task forces. A task force manager bases his power on his knowledge and skills. Network ties are very different (e.g. formal and informal). The essential feature of network structure is lack of hierarchy. Instead of hierarchy there are strategic levels.

The network structure enables the introduction of modern management systems to water and sewage sector such as a process management system. In the process management system managers ought to delegate their responsibilities and tasks to subordinates, who provide services directly. In this way the service provider is able to make decisions more quickly. Therefore responsibility and task delegation guarantee not only better service quality but also cost cutting of subordinate control [Kowalczyk 2011:44].

On the 1st of January 2011 there were 2479 local communes in Poland. According to the data collected by The Treasury Department, which monitors the privatization of public property, the total number of public providers of water supply and sewage disposal services was 1119 [*Informacje o przekształceniach...*2009]. The total number includes 49 budgetary units (which was 4.4 % of the total number of public providers of water supply and sewage disposal services), 522 budgetary institutions (46.6%), 528 limited liability companies (47.2%), 20 joint-stock companies (1.8%).

The data shows, that very often a provider of public services is a part of local commune administration or conducts its activity as a company whose shares are possessed by a local commune. The most popular legal forms to conduct water and sewage activities are limited liability companies and budgetary institutions. A legal form such as a budgetary unit and a joint-stock company are rarely used.

Shares of companies which provide water and sewage services are mainly possessed by local authorities. The number of limited liability companies, in which local authorities have all shares accounts for 469 (from the total number

of 528 limited liability companies). While the number of joint-stock companies, owned by local authorities, accounts for 15 (from the total number of 20 joint-stock companies) [Informacji o przekształceniach...2009].

The figures mentioned above shows that the Polish water supply and sewage disposal industry is enormously divided. One firm usually provides services to the population of one local commune. The limited range of an enterprise's activity results in there being no advantage of scale effect. The most popular form of ownership is a municipal property.

4. The assignments of local commune administration related to water supply and sewage disposal market regulations

The Polish system of water supply and sewage disposal market regulation is a cost model. In this model water and sewage company have to show and prove its costs as well as methods of cost allocation for different kinds of receivers. So in a cost model, there is a regulator who controls the provision of services by water and sewage firms [*Uzasadnienie projektu rządowego...*].

Local commune administration such as a market regulator carries out assignments related to controlling water supply and sewage disposal. The aim of regulatory activities is the protection of consumers. This protection is based on the optimization of services costs provided by water and sewage companies. Local authorities could conduct their regulatory functions by utilizing the following "tools": 1) granting concessions to carry out water supply and sewage disposal activities 2) approving tariffs for water supply and sewage disposal services 3) establishing rules related to water supply and sewage disposal services 4) imposing fines for water and sewage companies which don't pay tariffs. The usage of such legal tools is shared between a mayor and a council. A mayor is entitled to grant concessions and impose fines. Whereas a council approves a tariff and passes an instruction [Komentarz... 2007, s. 121].

In a cost model, the basic legal regulatory tool is a tariff approved by council. Each water and sewage entrepreneurship fixes a tariff for one year. It calculates a tariff based on necessary revenues. The firm forecasts the amount of turnover from each group of consumers. The tariff includes prices and rates which could be different for each group of receivers but the first company has to prove that the costs of provided services for each group of consumers are various. As the most common consumers of water and sewage services are chiefly members of households, schools, hospitals and small enterprises, we can distinguish the most common groups of receivers of water and sewage services: households, public services providers and industry [Kopańska, Bartczak, Siwińska-Gorzelak 2004: 114].

Tariffs for water supply and sewage disposal services consist of fees for each groups of receivers and rules for fee usage. A fee includes a price and a rate. They have to be published in a local newspaper. There are three kinds of fees: a global sum fee, a quantity fee and a mixed fee [Moszoro 2005:173]. The global sum fee is constant because it doesn't depend on the quantity of provided services. But more often water and sewage companies are introducing quasi global sum fees. This kind of fee depends on the number of members in a household [Sadowy 2010:69]. The quantity fee is based on the quantity of provided services. Whereas the mixed fee consists of a changeable fee and a constant fee. The changeable fee depends on the quantity of provided services. While a constant fee depends on productive capacity and depends on the water and sewage company.

The mayor and council are responsible for approval of tariffs. Their approval is necessary to protect clients. In this way local authorities control water and sewage prices and rates. This control consists of two stages. In first stage the mayor analyses the tariff. He verifies whether the tariff is lawful and proper. In the second stage the local council must approve the tariff. The council is able to refuse approval of a tariff isn't consistent with the law. The council has to undertake such a decision within a 70 day period starting from the day the enterprise fixes the tariff. The verified tariff becomes valid if council doesn't come to a decision within the period mentioned above. In such a way local authorities prevent overpayments in the price of water and sewage, and thus protecting water and sewage service receivers.

5. The evaluation of Polish water supply and sewage disposal market regulations

Independence is an essential quality of an effective regulatory body. A regulator is deemed independent if it is located in a separate office and isn't subordinated to other public authorities. An office is defined as a team of people who contribute to perform particular public administration functions. We should differentiate between a clerkship from a clerk (a person who holds an office) since they vary in meaning in administrative law. First of all, a clerkship is used to precisely assign tasks and responsibilities to the members of an organization [*Prawo gospodarcze...2007*: 250-252]. In this way an organization is able to collect knowledge and ensure repeatable and constant functioning. In scientific literature this feature is called institutional memory. Only in such circumstances will the regulator be effectively able to act. It means that a regulator will effectively protect consumers against the infringement of their rights.

In Poland a local commune administration is a water supply and sewage disposal local market regulator. A local commune is a basic level in Polish self-government. It is responsible for all local public affairs. Local authorities are chiefly responsible for satisfying public services demands [Dolnicki 2001:1631. Therefore, regulation tasks are one of many assignments of a local commune administration. A few regulation tasks, such as tariff approval are conducted once a year. Specialist knowledge is required for tariff control. Local authorities may acquire this knowledge in different ways. They might hire well-educated and skilled staff in local commune administration or train already employed clerks. But such expenditures of public money seem irrational chiefly for small communes. Due to various public assignments and rare tariff control local public administrations don't generally possess the specialist knowledge, which is necessary to conduct regulation tasks effectively. The lack of competent employers leads to regulatory inactiveness. This fact has been confirmed by Competition and Consumers Protection Office in its report. [Raport UOKiK... 2011:127]. The report points out that in 54.7% examined cases, water and sewage firms fixed tariffs without control (The Office examined 131 entrepreneurships)

A local commune is really a political organization because the mayor and a council are chosen in elections. These facts affect decisions made by local authorities. The ubiquitous decision making model in local communes is based on political rationality. According to political rationality conflicting interests are reconciled and conflicts are resolved in a way which is accepted by ruling political parties. Thereby parties are responsible for public affairs because they were chosen in the election. [Kożuch 2004:171]. Public authorities usually keep continuity of making decisions only in periods between the previous and the next election. In these circumstances a regulator isn't capable of maintaining institutional memory.

Local commune administration controls all water supply and sewage disposal firms which provide services in the commune area, no matter what their legal form is and who their owner is. Local commune administration controls private firms as well as its own units and companies. In relation to budgetary units, budgetary institutions and companies whose shares are possessed by local commune, local authorities exercise their owner rights. In this case public authorities have conflicting interests, since local commune administration as a regulator has to care for public services receivers' interests. Alternatively, the local commune administration, as the owner, should protect the economic interests of its own units and companies. Therefore local administration doesn't have a fair policy because of the concentration of economic and administrative power. In this case the local commune administration is both an arbitrator and in a partial relationship

with other firms. [Wojciechowski 2003:161]. At present local communes own the majority of water and sewage entrepreneurships. In most cases local administration controls its own units and companies. Therefore there are no independent regulators in Poland.

Changes in Polish water supply and sewage disposal market regulations must be introduced. A province self-government administration, instead of local commune administration, should be the water supply and sewage disposal local market regulator. The provincial self-government is simply a higher level of the Polish self-government. In such a case a regulator won't be an owner of enterprises being audited. He would audit more than one water and sewage firm. Therefore his knowledge of expenditures would be more rational.

The establishing of a regulatory office for the whole Polish water and sewage sector is the wrong solution because of huge expenditures involved. In this case a regulator would have to audit too many companies.

A cost model of regulation has shortcomings which are mentioned in other literature about economics [Shleifer 1985:319]. This model of regulation doesn't solve the problem of efficient cost reduction in water supply and sewage disposal firms. Companies have no economic incentives to cut costs when the price of the service depends on these costs. A regulator also doesn't know about the proper level of service providing costs. That is why he isn't able to evaluate a service provider's efficiency.

6. Conclusions

There is no effective regulation in the water supply and sewage disposal market in Poland because of a lack of proper regulations controlling it. The essential feature of an effective regulator is independence. Additionally, an effective regulator has to have knowledge and an institutional memory. Polish regulators possess none of these features.

Local commune administration, as the regulator, isn't impartial. Local authorities own most of the water and sewage enterprises. In this case the regulators' independence is limited because public authorities audit their own firms.

Local commune administration controls firms only in the local market. In most cases there is one company which provides both kinds of services (water supply and sewage disposal). Besides, local authorities verify tariffs very rarely. Under these circumstances there are no incentives for public administration to become more educated in this field.

References

- 1. Baehr J., Stawicki E., Antczak J., *Prawo energetyczne*. Komentarz, Zakamycze, Kraków 2003.
- 2. Bielski M., *Podstawy teorii organizacji i zarządzania*, Wydawnictwo C. H. Beck, Warszawa 2002.
- 3. Dolnicki B., Samorząd terytorialny, Zakamycze, Kraków 2001.
- 4. Dziembowski Z., *Ekonomika przedsiębiorstwa komunalnego*, PWE, Warszawa 1983.
- 5. *Informacji o przekształceniach i prywatyzacji mienia komunalnego w roku 2008*, Ministerstwo Skarbu Państwa, Warszawa 2009.
- 6. Kierunki ochrony konkurencji i konsumentów w sektorze wodnokanalizacyjnym, Raport UOKiK 2011.
- 7. *Komentarz do ustawy o samorządzie gminnym*, red. P. Chmielnicki, Wydawnictwo Prawnicze LexisNexis, Warszawa 2007.
- 8. Kopańska A., Bartczak A., Siwińska-Gorzelak J., *Partnerstwo publiczno-prywatne. Podmioty prywatne w realizacji zadań publicznych sektora wodno-kanalizacyjnego*, CeDeWu.pl, Warszawa 2008.
- 9. Marketing usług, red. A. Styś, PWE, Warszawa 2003.
- 10. Kowalczyk J., *Doskonalenie zarządzania organizacją w praktyce*, CeDeWu.pl, Warszawa 2011.
- 11. Kożuch B., Zarządzanie publiczne. W teorii i praktyce polskich organizacji, Placet, Warszawa 2004.
- 12. Miszczuk A., Miszczuk M., Żuk K., *Gospodarka samorządu terytorialnego*, Wydawnictwo Naukowe PWN, Warszawa 2007.
- 13. Moszoro M., Partnerstwo publiczno-prywatne w monopolach naturalnych w sferze użyteczności publicznej, AGH, Warszawa 2005.
- 14. Porter M. E., *Strategia konkurencji. Metody analizy sektorów i konkurentów*, PWE, Warszawa 2000.
- 15. *Prawo gospodarcze. Kompendium*, red. J. Olszewski, Wydawnictwo C.H. Beck, Warszawa 2007.
- 16. Sadowy M., *Podstawy ekonomiki przedsiębiorstwa komunalnego*, Wyższa Szkoła Finansów i Zarządzania w Kielcach, Siedlce 2010.
- 17. Shleifer A., *A theory of yardstick competition*, "Rand Journal of Economics" 1985, nr 3.
- 18. Stiglitz J.E., *Ekonomia sektora publicznego*, Wydawnictwo Naukowe PWN, Warszawa 2004.
- 19. Uzasadnienie rządowego projektu ustawy o zbiorowym zaopatrzeniu w wodę i odprowadzaniu ścieków, druk sejmowy nr 2316.
- 20. Wojciechowski E., *Zarządzanie w samorządzie terytorialnym*, Difin, Warszawa 2003.

Beata Pater*

IMAGE AND COMMUNICATION OF POLISH NATIONAL PARKS

Abstract

This paper contains the analysis and evaluation of image and social communications in national parks in Poland. It is based on the results of research conducted by 'Starcom MediaVest Group "on behalf of the Tatra National Park. The purpose of intentional communication activity is to increase trust in activities undertaken by the institution to improve public perception and acceptance. This paper summarizes the communicative picture and image of national parks in Poland. It is an attempt to assess whether image-building and communication activities vital to the goods and services market are also needed for national parks.

Key words: image, communication, national park

1. Introduction

National Parks in Poland are located in regions of the most valuable natural environments. Currently, there are 23 national parks, that cover an area of 316 748 hectares (approx. 1%) of the country. The smallest park is Ojcow National Park near Krakow - 2146 ha, the largest is Biebrzanski National Park, located in the Biebrza Valley area in the province of Podlasie - 59 223 ha.

National parks were established to protect wildlife. The protected areas are guardian to all our natural resources and the specific characteristic of each region's landscape values. Eight national parks in Poland have been acknowledged as being some of the world's most important biospheric reserves (Babiogorski, Bialowieski, Bieszczadzki, Kampinoski, Karkonoski, Poleski, Slowinski, Tatrzanski), while seven belong to the Ramsar Convention, which protects wetlands vital to preserving birdlife: Biebrzanski, Narwianski, Karkonoski, Poleski "Ujscie Warty", Slowinski and Wigierski.

^{*} mgr, Cracow University of Economics, student of Ph.D. program..

Parks are open to visitors. The parks contain 3,243 km of hiking trails and 129 educational paths. Moreover, almost all of national parks operate nature museums or educational centers. Parks also conduct their own publishing activities. The number of visitors visiting Polish national parks annually is about 11 million. [6]

The aim of this paper is to present research results concerning the image and communicativeness of Polish national parks and an attempt to assess whether the image-building and communication activities vital to goods and services market, are also neccessary for national parks.

"Starcom MediaVest Group" ,on behalf of the Tatra National Park, during the period 28.02.-03.07.2012 conducted a survey to learn how Poles feel about Polish national parks. The research was based on a sample size N=2400 from all over the country, with the questionnaire being available online - CAWI (name is an abbreviation for Internet interview) supported by RTS (Real Time Sampling) technique, with emissions of invitations on popular websites. Invitations to participate were screened for users on websites reaching over 70% of Polish Internet users in total. The sample was selected as a random-quota. Surveys were gathered by Interaktywny Instytut Badan Rynkowych (Interactive Market Research Institute). The respondents were Internet users aged 20-49 having completed at least a secondary education and who are planning a vacation or even a short weekend trip within the next 2 years.

The structure of the sample reflected the structure of the target group for gender, age, education and size of residence. The results were analyzed with regard to the following data; gender, age, education, size of residence, and variables related to lifestyle and computer /web competence based on results from the IPSOS survey, February - April 2011.

69% of all respondents planned to holiday within Poland, 65% of which indicated a strong willingness to visit a national park. Moreover, the study shows that national parks are more interesting tourist destinations for the elderly as indicated by - 74% in the 35-49 age range, as well as -68% of those with higher education.

Information on interesting places with nature reserves is found directly from the Internet - 50% of respondents from websites dedicted to the subject, 42% from forums, blogs and social networks. Women are more likely to explore travel websites and travel portals, while men surf through more concrete sites.

Poles spontaneously mention the Tatra National park (52%) and the Bialowieski National Park (50%) as beiing the best-known among their countrymen. The least-known are Drawienski and Ujscie Warty - both were mentioned only by 1% of those surveyed. National parks in general are a common subject of conversation in Poland. The survey shows that only 2% of respondents were not familiar with any national parks in Poland.

More than half of the respondents have visited a national park in the past two years, while 80% made repeat visits. Among those national parks visited in the last two years, the most popular is the Tatra National Park (27%), while the least popular are Magurski, Drawienski, Poleski and Ujscie Warty (1%). Active holidaymakers also pointed to the Tatra National Park (TPN) - 40%. Subsequently the second in this category and lagging far behind is Ojcow National Park (18%). The study also found that parks situated in the mountains, are more frequently visited. More than half of respondents (59%) previously planned a stay in a national park. Every third person had visited a park without prior planning. Most are one-day stays (53%) and weekends (17%). Summer vacation (53%) is the most popular time to visit a national park.

The reason for visiting the national parks is active recreation and nature itself. The exception are people who have children. Their motivation to travel to national parks is passive recreation. People with higher education more often declare their desire for active leisure in the park. With age, a growing number of respondents chooses passive recreation in parks. Respondents with secondary education aged 20-24 often decide to go to a national park to explore and observe nature.

Starcom MediaVest Group, on behalf of the Tatra National Park, used a surveying technique known as "DESK RESEARCH" to evaluate "How do they see us?". Research using the Internet and syndicated media research as a data source were utilized to analyze communicativeness within national parks. As part of this analysis the visual identification of national parks was examined as well as access to information on their websites, publishing and the use of mass media.

2. The image of national parks in Poland

The image of a national park is a picture formed in the mind of a person. It's a set of features, ideas, values and associations that people attribute to a park after having a direct or indirect contact with it; as is, for example, with local governments, residents of neighbour towns, businesses working with the park, as well as tourists. The image is therefore constructed in mind of interested people, through a network of associations. It consists of beliefs, mass media communication, including advertising and personal experiences. [Matysik 2009, p. 10-11].

The image of a national park is a reflection of its identity, and thus a set of stimuli and symbols by which it is recognized and assimilated. The concepts of image and identity are not synonymous, because identity is understood as a complex, self-image that the operator intends to pass around, a kind of self-image. Identity consists of three components: attitude and behavior of

members of the organization and corporate identity (logo, symbols, slogans, etc.). Identity is therefore a desirable way of perceiving the organization, which is created by the attitudes, behavior and visual elements. Image is the real identity in the minds of consumers. Image is what people think about the organization, while identity is the set of stimulus and symbols through which it is identified and recognized. An important feature of image is its dynamic character. It may be subject to transformations due to various experiences, views and beliefs. This means that image may be modulated. [Szwajca 2009, p. 21]

In view of the above definition of image and identity, it is clear that regardless of the intended actions in creating an image or, as is often in the case of national parks, their absence, every organization has an image.

2.1. The expectations of society towards national parks

Results of this study suggest that national parks are most associated with nature, claimed 39% of responses, animals - 24%, forest, trees, green - 21%, silence, peace - 19%. Interestingly enough 1% of the respondents associate national parks with dirt and crowds while only 4% with rest and relaxation. However, associations with nature tend to dominate in general. According to respondents, national parks should have a particularly beautiful and unspoilt nature (19%), trails (15%), clear road signs along trails (12%), tranquility, peace (12%), and a rich flora and fauna (9%). According to respondents national parks should be clean and well maintained - 12%. Only 1% of the respondents replied that they have no interest in visiting national parks.

Those surveyed believe that the most important feature of a national park in relation to touristic infrastructures are observation points (72%), hiking routes and educational trails (85%). Research shows that tourists in national parks want attractive entrance fees (51%), and a special price for families (27%). The Nature Protection Act of 16 April 2004 (Journal of Law 2004, No. 92, position 880), article. 12 section 5 clearly indicates that the charge for a single entrance to the park can not exceed 6 PLN indexed by the projected average price index of consumer goods and services in general, adopted in the Budget. Some national parks, for example, Wolinski, Ojcowski eliminated the fees for access to their land. Respondents in the study found that least important to them is the possibility of visiting the national park as a package tour with a guide (20%), organized activities for children (22%) and the possibility of visiting a nature museum on park land. (6%).

2.2. Perception of national parks

The study identified perceived images of each of the 23 national parks in Poland within the following categories:

- the most beautiful national park in Poland,
- offers many attractions for children,
- UNESCOs reserve.
- attractive to tourists.
- offers a variety of activities,
- affordable,
- ideal for a quiet holiday with "nature"
- Good to go with your family,
- Good for a short weekend trip,
- requires special protection of the State
- there is a conflict between nature conservation and human intervention.

This enabled a clear picture of the differences in the perception of a particular Brand Name or national park as opposed to the competition. The purpose of Brand Name is to achieve a desired competitive position, and therefore it becomes a very important marketing tool used to identify the product with the positive, desirable qualities in the market. A Brand Name identity is a unique and unambiguous identification based on the sum of associations that it brings. It carries with it the promise of benefits that consumers will receive and guarantees their complete satisfaction. For a comprehensive image of the unit consists of several dimensions: economic, tourism, sports, settlement, cultural factors, etc. These are factors which have either direct influence, limited influence or no influence at all. The image is inherently neither good nor bad, but rather right or wrong for the organization. This is because of, as already mentioned, the subjective image in the mind of the recipient, which is formed by his efforts, experience, ideas and observations, and overall experience from which he assesses his surrounding reality. [Piątkowska 2010, p. 13-16]

As the author mentioned earlier, national parks do not build up their Brand Name with any intentional plan. This does not change the fact that they have a Brand Name which has its own associations. Certainly, each of the national parks have an image and the respondents were questioned about it. Among the more prominent parks in terms of the various categories, a certain sumarization can be made. For a family visit and for a short weekend trip, the Ojcow National Park is the place to go. The Bieszczadzki National Park stands out strongly as the ideal park for a quiet holiday in the countryside but does not offer many attractions for children and is not good for a short weekend trip. Tourist movement does not cause conflicts generally. The Bialowieski National Park is most

frequently acknowledgd by respondents as the place to go to visit a UNESCOs reserve. Respondents also agree that it requires special protection of the State. In the opinion of respondents, this park does not does not have many attractions for spending time in an active way, nor is it good for a short weekend trip, although it is recognized as one of the most beautiful national parks in Poland. Respondents decided that an attractive tourist destination and good for a short weekend trip with the family ,although not ideal for a quiet holiday in the countryside, is the Gor Stolowych National Park. In terms of attractiveness negatively rated is "Bory Tucholskie", Drawienski and Biebrzanski National Park, Drawienski and "Bory Tucholskie" national parks are, according to respondents, affordable and ideal for a holiday close to nature. The Biebrzanski National Park requires special protection of the State and is recognized as a UNESCOs reserve. Even though Kampinoski National Park offers many activities for children and is recognized as a UNESCOs reserve, it was not considered as attractive to tourists. Respondents claim, that there is a big conflict between nature conservation and tourist activity. Roztoczanski National Park is ideal for a quiet holiday in the countryside. Although affordable, it is not regarded as an attractive tourist destination.

Poleski National Park was found to be ideal for a quiet holiday close to nature, although, according to respondents, is unattractive to tourists. It does not offer many outdoor activities. There is no conflict between the conservation and tourist activity. Pieninski National Park and the Karkonoski National Park are not perfect for a quiet holiday close to nature, but offer many recreational options. There is a high level of conflict between nature conservation and tourism, according to respondents, in Wielkopolski National Park. It is also unattractive to tourists. Wigierski National Park is perfect for a quiet holiday in the countryside. It also offers many recreational options. But it is not good for a short weekend trip. The Tatra National Park was found to be an attractive tourist destination, but unattractive as far as prices are concerned. Respondents claimed that it is the most beautiful national park in Poland. They perceive a strong conflict between nature conservation and tourist movement. This is not a place just for a weekend stay close to nature, nor are the Slowinski and Swietokrzyski National Parks.

The Tatra National Park and Bialowieski National Park have been identified by the largest percentage of respondents-67% and 59% as being the most attractive in terms of contact with nature. The fewest number of people consider Magurski (27%) and Wielkopolski (24%) National Parks as attractive as both possess a the wealth of nature. TPN was also found as the most attractive in terms of tourism infrastructure (45%) and additional attractions such as museums, active recreation and organized trips (36%). Indicated to be the least attractive for the same reasons is Narwianski National Park (9%) and Magurski National Park (7%).

Nearly 58% of respondents have visited one of the national parks in Poland in the past 2 years - 41% of them more than three times, while 15% only once. Respondents considered all the national parks worth visiting, but the Tatra (68%) and Bialowieski National Parks (59%), are pointed out the most frequently. The fewest number of people consider Wielkopolski (23%) and Drawenski National Parks (25%) worth a visit.

The study shows that Tatra National Park is perceived to have the best image. It is the best identified park of all national parks in Poland.

3. National Parks as message transmitters

Any information from transmitters are sent as messages. These messages may be in the form of graphical information, clothing, interior design, small architecture, text messages, mass media communications or other methods of of interacting with customers. Messages influence the picture of the sender as is formed in the minds of consumers, and thus affect their image.

Today's public service managers and in this case national park directors should be aware of the role of communication in the management process and recognize the difference between general communication and effective communicating. A condition for the development and efficient management in public administration is a high level of efficient communication in society. It can be assumed that the more effective the communication, the better the reception will be of public services. Everyday, a scheme or regular plan for comunicating ideas should be included on an ongoing basis as part of public service. Communication with the public produces different effects for participants of this process. [Folga, Tanski 2008, p. 102-103] These are the effects of: emotions - joy, anger, understanding, psychophysics' - the struggle, persuasion and cognitive - a new look, increased knowledge, to formulate opinions. [Stankiewicz 1999, p. 56]

The Tatra National Park is the only one that holds a professionally developed corporate identity (CI) system. Other national parks' visual identification is inconsistent, often outdated, not really responding to current market trends. National parks carry out difficult, tasks issuing decisions relating to the protection of natural resources. Often decisions are made inconvenient for the various interest groups. For this reason the benefits of a well developed CI can be substantial and facilitate management, improve the aesthetic value, improve the atmosphere of trust through visible movement in terms of professionalization of services, increase employee satisfaction, motivation and a sense of belonging, increased efficiency in communication and standardization of certain activities. This as a whole assists in providing a coherent and consistent image of the park, distinguishing it in a broad sense from its competition (eg in the segment of leisure time activities).

In colloquial language, the logo and logo type are synonyms. However, the logo is a broader concept and can be composed of four parts:

- the logo the name of the business presented in the form of letters in a particular style,
- signet a graphic symbol of distinction,
- Brand Claim, tagline
- the background appearing under the above three elements. [Matysik op. cit, p. 11]



Figure 1. Logos of national parks in Poland. [Source: national park websites]

Colors of logos are varied, but dominated by earth tones, such as shades of brown and green. They also differ in motives that appear in the middle of the circle. They present plant or animal species specific to the park. Some parks also give the year of establishment (Magurski, Pieninski) or an abbreviation of its name (Roztoczanski). In addition, some parks that are located on the World List of Biospheric Reserves place a logo of MAB (Karkonoski, Białowieski, Babiogórski). Various fonts are used - not only the types vary but also their size and color. The dominant form of the national park's logo is framed around the ring with the name of the park. However, there are differences as in some parks, the ring is separated by a line (eg, Magurski, Biebrzanski), while in others it is partially separated (eg Poleski and Karkonoski), and in others there is no separation at all (eg Kampinoski and Ojcowski).

The logo of Gorczanski National Park is a transformed form of a circle while that of the Tatra National Park consists of a circle and the name of the park. The logo of the Pieninski National Park differs from the others in shape. Non-standardized logos may make it difficult for the public to associate the logo with the national park. National parks keep record of their own finances and management. However taking into consideration one overriding feature of all existing national parks; in other words, to protect unique natural resources in Poland, the parks should be treated as a coherent system collectively.

A lack of systematic solutions or graphic diversity and flexibility, is also reflected in the lack of joint visual identity for particular web pages of Polish national parks. They are designed according to different models. Website layout, logo and menu layout are incoherent. But there are elements that do connect them all. Most common are the tabs, such as: News, The Park, Nature Protection Plan, Tourism, Hiking, Education, Admission and Fees, Gallery, Links, Publishing and Research. There are many ways to navigate around the website. As the menu of each one is different, the web subpages differs too. Colors are not similar either. In most cases they do not correspond to the colors found in the national park logo. The only common theme, which appears on most websites is a shade of green, which refers to nature.

Resources were considered to be available if they used the principle of three clicks, which states that each internaut should be able to reach each section and function of a website ina maximum of three steps. Certain elements exist that can be found on every or almost every website, such as a description of the natural resources located in the park and how to protect them against damage, rules for sightseeing and entrance fees, hiking routes and education trails. Other information (eg park infrastructure, accommodation, attractions of the region, cultural heritage, events, communications, tourism, guidance, maps, tourist information points) are only on certain pages of the national parks. That does not mean that there is no informative information at all.

Facebook is currently the best channel of interactive communication with Internet users. However, only five parks have heir own fanpage on facebook.com., 13 parks exist in this social network for use of geolocation, 4 as a result of interest in the park, 2 have normal user profiles (Wigierski and Poleski).

SEM (Search Engine Marketing) is aimed at obtaining the best possible position on the web as a result of searching the Internet by typing in selected words / key phrase by the user. Google Insights for Search is a tool showing how to search for information in browsers. It allows you to search for new keywords, trends in the process of searching for products and services and allows you to keep track of popular keywords in different regions of Poland and the World. When searching for information about hiking trails, education trails and horse riding trails, national parks are among the first to pop up at google.com,. The most popular search phrase related to "trails" is associated with the city of Zakopane - Tatras. Interest in the Bieszczady Mountains and the Karkonosze is growing. The phrase "national park" is repeated on an annual basis, with the peak in May, and a drop in August. Another period of increased interest is in November. Most popular searches are related to Ojcow National Park and phrases related to Bialowieski National Park.

National parks operate publishing houses. Information on printed publications can be found on the websites of 19 national parks. They can be classified into scientific and popular science. National parks have no coherent system to sell the publications. They are usually available at tourist information points and premises of national parks. Some parks offer the traditional mail order. Ordered items can be obtained after the payment to the bank account of the park and after sending an e - mail with order form filled out, or by bank transfer with the title of the publication written in as payment title. Individual parks (eg Tatra) sell publications via its own Internet shop.

This study analyzed the location of the logo and the use of color and font in 12 guides and books on wildlife and / or flora of national parks, which are available at the National Library in Warsaw. The logo is usually on the front cover. In some printed publications there are other references to the park such as an introduction written by the park director or usage of the phrase "our park", "our mountains" or emphasizing that the publication was issued to commemorate the establishment of the park. The most popular layout is black and white pages with single color or a color insert with photos and graphs. The guides or monographs individual chapters are color coded to help customers find needed information. They are written in plain language. Graphic design including the font used in printed publications is not unified.

Uniforms for employees of all national parks are the same. They differ only by the logo of the national park, which is located on the shoulder. A tourist traveling to the various national parks should have no problem recognizing park staff. Article 104. section 19 of the 16 April 2004 Nature Protection Act (Journal of Law 2004, No. 92, position 880) specified designs for uniforms and uniform items.

Road signs along tourist routes in national parks are inconsistent. Some parks display their logo, others, abbreviated park name or PTTK, the branch responsible for marking. Welcome signs standing at the entrances to the various national parks do not have common elements. Some of them seem to be forgotten, others are unaesthetic. In the national parks of the United States welcome signs get the attention of every tourist, who invariably wants to take a picture. Their welcome signs differ from each other. Each is well maintained and has the National Park Service logo on it. The full name of the National Park printed in the same font and with the corresponding park logo would create a coherent image of the parks.

In the same way, markings on the entrance gates of national parks is not unified. A common feature would be to include some sign relating to traditions and local culture. However, each park marks its own entrance differently with, for example, the full name of the park or an abbreviation. Hence it would seem quite reasonable to create a visual identity system, composed of logos, colors and font. This would help to create a website layout and other promotional materials. Small architecture features and signs would benefit by improved clarity and attractiveness if a common theme for the whole system of national parks was created.

Over the past 2 years (January 2010-January 2012) 3 out of 23 national parks were advertised in Polish newspapers and magazines. Bialowieski National Park ran an advertisment in Newsweek Polska, while Karkonoski and "Gor Stołowych" in Gazeta Wyborcza. Mass media advertisement spending of the last two parks are estimated at few thousand PLN. Bialowieski Park ran an advertising campaign worth tens of thousand PLN. Each of the advertisements promoted only that particular park and its values with no reference to the idea of promoting all our national parks as places worth visiting.

National Parks cooperate with companies within their CSR activities. Among those who based their activities on corporate social responsibility commitment to protecting natural resources in Polish national parks, were: Bank Pekao SA, Żubr brand (Campania Piwowarska S.A.), Tetra Pak.Sp. z o. o., Milka brand (Kraft Foods Polska S.A.) and Nowy Styl Sp. z o.o.. CSR activities has supported the conservation of nature in eight of the 23 national parks, such as the Bialowieski, Tatrzanski, Bieszczadzki, Ojcowski, "Gor Stołowych", Wielkopolski, Kampinoski and Magurski. They differed in scope and concept of involvement of the company. [1]

¹ Summary made by the author of the paper based on the information available on the websites of national parks and the Responsible Business Forum: www.fob.pl.

National parks do not benefit from nationwide media, although they could use their communication potential. There were three advertisements of national parks in the last 2 years and all were published in newspapers or magazines. They occasionally use public relations. Certainly it is possible to widen the PR activity. On the various web portals articles on national parks are published, which may be due to the use of media relations activities. National parks could also pay more attention to optimizing communication activities such as SEM, the positioning of websites and interactive communication on fanpages or in response to comments and questions left on their websites. Above all, they should focus on the graphics and unification of visual identification, and improving the functionality of websites. It will help to access easier to the necessary information.

4. Conclusions

Communication may have different goals. Crucial to the parks, regardless of existing legislation, should be informing the public in an accessible and understandable way about why it was established, and, despite of sometimes significant limitations, how important a role they play in the community. In fact they become the motor of development for the region, about which residents seem to forget. It is important to gain public approval for their activities. Approval can be obtained only by understanding the actions taken by the management of national parks, such as active forms of nature conservation, or in the passive form of preventing deterioration. Incomprehensible to tourists can be forest management. Sometimes a visitor is outraged that the parks are cutting down trees, sometimes over large areas and selling the wood. A park should explain the reason of such decision and that by acting in this way it protects the wildlife. Deadwood rotting in national parks is often called by visiting tourists a "waste". Deadwood plays a key role in maintaining the forest's health and lifecycle. What is more- without sufficient amounts of deadwood the biodiversity of European forests will keep declining. People should be informed clearly what the role of such wood is in ecosystems. Many such examples could be sited. It is also worth it to consider promoting less popular national parks, and thus giving some relief to the most popular, such as Tatrzanski, which has almost 3 million visitors a year.

National parks communicate with the people, so it affects their image. Rarely, however, are these activities are subordinate to the strategy of creating their image in society and even more rarely are designed to increase sales. Letting visitors into parks for the sake of tourism with the aim of benefitting financially simultaneously, is both the old and the new reality: Old, because parks have always been accessible, and new as a result of changes in the

financing of national parks. Many of them will have to rethink their tourism policy in order to gain better profits. Since 1st January 2012, parks have become legal entities and are allowed to collect all revenue for the purpose of their activities. This is known to be beneficial for large, enterprising national parks while others will have to learn the business. The enterprising side of Polish parks is limited by the fact that parks were originally established to protect unique natural resources. Therefore, - to develop rules to increase benefits from tourism without compromising the overriding objective of parks – conservation of the natural environment, may not be easy. Tourists, as studies show, know rather little about the majority of parks. So parks are likely to increase their interest in advertising. Effective communication help to form a positive image of national parks, which in turn leads to public acceptance of their activities and a greater interest in their resources. This, in turn, may translate into increased revenues.

References

- 1. Folga R., Tański W., *Komunikacja społeczna w procesie świadczenia usług publicznych*, "Współczesne Zarządzanie", 2008, nr 3, s. 102-111.
- 2. Matysik J., *Jak Cię widzą tak Cię piszą*, "Marketing w Praktyce, 2009, nr 5, s.10-13.
- 3. Piątkowska M., *Marka i wizerunek jednostki terytorialnej- koncepcja i uwarunkowania*, "Marketing i Rynek", 2010, nr 1, s. 13-17.
- 4. Stankiewicz J., *Komunikowanie się w organizacji*, Wydawnictwo Astrum, Wrocław 1999.
- 5. Szwajca D., *Jak zmienić wizerunek miasta*, "Marketing i Rynek", 2009, nr 2, s. 21-26.
- 6. Ministerstwo Środowiska, http://www.mos.gov.pl.
- 7. Ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody o ochronie przyrody (Dz. U. 2004, nr 92, poz. 880)

Wioletta Roman*

FEES FOR THE USE OF THE NATURAL ENVIRONMENT BY ENTREPRENEURS - FEE CHARGING RULES AND REPORTING

Abstract

Fees for the use of the natural environment as a price creating factor in a business require ddefining accountancy rules for; processes leading to use of the environment, the indicators indispensable for charging fees as well as the fees themselves. The aim of this paper is to analyze the fee charging process and to simplify the procedure for some enterprises.

The factors causing the fee charging obligation are gas and dust emissions into the atmosphere, sewage disposal into rivers and the ground, waste storage and water consumption.

Due to length limitations, this paper discusses only the kinds and methods of charging fees for air pollution - the environmental component most often used by entrepreneurs. It also presents a report connected with fees for the use of the environment. Moreover, the paper handles the way of keeping business accounts of the processes and factors leading up to this type of pollution. There exists also the problem of those, especially small and medium sized businesses, who do not do their duty by keeping current records. (MSP) These should be reported and held responsible.

On the basis of my own survey research carried out in February and March, 2012 that covers a sampling of 100 MSP businesses, an attempt has been made to identify the causes of such a situation and suggestions have been put forward to simplify the fee charging process for using the environment.

Key words: environmental fees, pollution emissions, businessmen's obligations, environment use for business, environment protection

1. Introduction

The idea of the sustainable development influences the way we think about relationships between societies, economy and natural resources; it especially

^{*} mgr, Cracow University of Economics, student of Ph.D. program..

makes people aware of the necessity to make reasonable choices with regard to renewable and non-renewable natural resources.

Sustainable development is defined as a pattern of the socio-economic growth in which there is an integrated process of political, economic and social activities which aim to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come [art. 3 pkt 50, Prawo ochrony środowiska, Dz. U. 2008 nr 25, poz. 150 ze zm.].

One of the economic tools to deal with this issue are fees for the economic use of the environment as required by Polish law. Businessmen using the environment are required by law to monitor the extent to which the environment is being used during the business activity and to pay the due fees. Entrepreneurs, especially running small and medium size businesses, are not aware of their duty to keep records and file a report, or they think that fee charging and reports are too complicated so that they knowingly do not fulfill their legally binding obligations.

2 Environmental charges as a price for environment use

The fee for the environment use makes up one of many kinds of the so called environmental charges. Environmental charges mean the financial liability is imposed on organizations and businessmen and is executed by the public authorities (either central or local) in exchange for the use of natural resources such as air, water, land surface and others [Małecki, Kontrowersje.. 2007].

Environmental charges are defined in literature as a particular price for each unit of pollution emissions into the environment, e.g. 1kg of environmentally toxic gas or dust as well as the price for the used natural resource e.g. 1m³ of water. The price here means the amount of money which the purchaser is ready to pay in order to secure the right to use this natural resource. It is difficult to estimate the price of the environment. The European Environment Agency uses the term "environmental charge"; it means the financial liability consisting in the state service for the taxpayer in the form of the possibility to use the environment [Małecki, Opłaty...2009].

From the point of view of the environment economy, the environmental charges are the price for the right to use the natural assimilation capacity, whose scale should be calculated on the basis of the external costs caused by the disadvantageous activity. The environmental charge is not a market based (but decided by the state) price for the resources and environment quality.

The charges for environment use are a form of a public (not market based) rationing of the access to these resources [Fiedor 2002].

The environmental charges are the largest with regard to the value and basic kind of obligatory environmental fees in Poland; their share in all other environmental charges made up over 40% in 2008. [Małecki, Ocena funduszy...2011].

They are charged in PLN. The rates change every year depending on the inflation indicators.

The environmental charges rates are calculated so they take into account the negative influence on the environment of pollution emissions or the use of natural resources. Thus they rise together with the increase of their impact on the environment [Małecki, Opłaty...2009].

3. Entrepreneurs' duties with regard to calculating, recording and reporting environmental charges

As required by law for protection of the environment [Dz. U. 2008 nr 25, poz. 150 ze zm.] the economic entities using the environment are:

- a) an entrepreneur (businessman, a legal person, an organizational unit, which is not a legal person, who is guaranteed a legal status in a separate regulation; does business in their own name, as well as with civil law partnership associates (wspólnicy spółki cywilnej) and people working in agriculture dealing with the cultivation of animals, plants, market gardening, forestry and fresh water fish farming; and a health care provider who practices the profession of medicine, having private practice or specialist private practice [ustawa o swobodzie działalności gospodarczej Dz. U. 2007 nr 155, poz. 1095 ze zm.],
- b) an organizational unit which is not an entrepreneur (e.g. school, local authorities)
- an entrepreneur who is not an economic entity and who is mentioned in literature and uses the environment within the scope which requires permits.

All of these economic entities are required by law to calculate and pay charges for gas and dust emissions into the atmosphere, sewage disposal into rivers and the ground, waste storage and water consumption.

Table 1 shows the method for calculating charges for pollution emissions into the atmosphere in the system in which each entrepreneur using the environment is obliged to report calculated values for the use of the resources to the Chairman of the local government (Urząd Marszałkowski) and to the local Environment Protection Department (Wojewódzki Inspektorat Ochrony Środowiska - WIOŚ).

Table 1 The analysis of methods of calculating the charge for pollution emissions into the atmosphere

lp	Gas or dust emissions into the atmosphere	Payer	The way of calculating the charge	Comments
1	2	3	4	5
1	Sources of generated substances emitted into the air		The charge for the emission into the air is calculated in PLN for 1kg of substance emitted into the air. Table G in the announcement by the Environment Minister dated 4th October, 2010 about the amount of charge rates for the use of the environment for 2011 comprises 67 entries of gases and dust for which the rates PLN/1kg emission have been established.	In case of the lack of required permits for the emission of gases and dust into the air or an integrated permit, the calculated rates are higher by 500%.
2	Reloading of petrol	The entrepreneur emitting gases or dust into the air e.g. in the technological	The charge in the established lump sum rate PLN/Mg (Table H of the announcement by the Environment Minister dated 4th October, 2010) of reloaded petrol. dependent on the kind of the filled/ emptied container corrected with regard to the reduction in emissions.	
3	Furnaces with nominal thermal power up to 5 MW which burn coal, coke, wood, heating oil, or gas fuel.	processes, non-organized emissions and other sources which are discussed in column 2	The lump sum for the amount of the used petrol dependent on the kind of furnace (Table I of the announcement by the Environment Minister dated 10th October, 2010.	This entry deals with the furnaces which do not require permits for gases and dust emissions into the air.
4	Combustion engines		The lump sum rate PLN/Mg per unit of the used fuel dependent on among others the kind of the combustion engine, the registration date, kind of fuel; in total 32 types differentiating rate per unit (Table J of the announcement by the Environment Minister dated 4th October, 2010.	
5	Poultry farms		The unit rate PLN/100 battery cages and the year dependent on the way of raising and the kind of poultry (Table K of the announcement by the Environment Minister dated 4th October, 2010)	

Source: my own study based on the: obwieszczenia MŚ w sprawie wysokości stawek opłat ..., MP nr 74, poz. 945; rozporządzenia RM w sprawie opłat... Dz. U. 2009 nr 196 poz. 1217; rozporządzenia MŚ w sprawie wzorów wykazów..., Dz. U. 2009 nr 97 poz. 816; ustawy - Prawo ochrony środowiska, tekst jedn.: Dz. U. 2008 nr 25, poz. 150 ze zm.

Every economic entity using the environment is obliged to file reports about the scope of the environment use and to pay charges; the calculation of the charges is done individually.

There is a uniform rule with regard to its collection (calculating and paying) making the economic entity using the environment totally responsible in this respect [Małecki, Opłaty...2009]. At present the fiscal period for the charges covers 6 months, with the exception of water disposal from animal or fish farms; if the calculated environmental charge for a particular component does not exceed 400 PLN for 6 months, the economic entity is exempt from paying the charge, but is not exempt from the obligation of filing a report about the scope of the environment use. There are also many exemptions from these charges. However, because of the limited scope of this research paper, they will not be considered here.

The report should be submitted to the Chairman of the allocated local government where the use of the environment occurs. It means that the entrepreneur, whose headquarters are in a different province from that of the manufacturing plants, is obliged to submit several reports and submit the appropriate charge payment. If the report is not filed, a fine of up to 5 K PLN is imposed as per regulations from May, 2012.

Moreover, each economic entity using the environment is obliged to make a report and submit it to the national database up until the end of February each year; the report should cover the previous calendar year containing a detailed report of the scale of greenhouse gas and other substances emissions as well as the activity which generates these emissions.

The national database is run by the National Centre for Balance and Emissions Management (KOBIZE) [ustawa z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji, Dz. U. 2009 nr 130, poz. 1070 ze zm.]. Due to the scope and complexity of the subject matter this research paper does not include reports to KOBIZE through (the portal www.krajowabaza.kobize.pl).

Each entrepreneur is obliged to record data in such a way as to enable the calculation of charges and the filling in the relevant data on standard forms. The broad term, the record (the record of environmental charges – outlining the processes as well as indicators and factors for the environment use and also the amount of the charges), is the component of company accountancy. The essence of accountancy is rendered well by the American Accounting Association which defines accountancy as a process of identification, measurement, as well as economic information transfer, which enables the forming of opinions and decisions by recipients of this information[Drury 1996]. Therefore accountancy is the process of supplying information which is helpful in rational decision making. This very function of accounting will be interesting for entrepreneurs

in the context of sources and the scope of the environment use as well as the amount of the due environmental charges.

The system of business record consists of the following three kinds of records: operative, accounting and statistical. The operative record is a system of current register made in natural or money units. They serve to observe, measure, record, and to classify particular chosen phenomena connected with the economic entity's activity e.g. recording of the factors causing the environment use. The accountancy record called accounting is based on among others on data supplied by the operative record and uses the specific method of current reflecting of economic data called the method of double register. The statistical record deals with quantitative description of phenomena and economic processes taking place in the economic unit; it is based on the information supplied by the operative record and accounting [Nowak 2002].

The operative record with regard to the environmental charge depends on the recording of the factors and processes causing the use of the environment as well as indicators determining the amount of charges. The record of the factors causing the emissions into the atmosphere must be carried out with scrupulous attention to detail; the example of such recording is presented in Table 2.

Table 2. Data gathering about the amount of pollution emissions into the air in the entrepreneur's operative record.

Gases and dust emissions into the air	The scope of gathered data
for the sources of substances emitted into the air	places of generation, sources of generation, names and codes of emitted substances and the amount of emissions, characteristics of fuels causing emissions
for reloading of petrol	the amount of reloaded petrol based on the division for a particular local administrative district, kind of filled/emptied container (a container with the permanent roof, floating one, an above the ground, underground container), filling of railway or car cisterns, car containers,
for the furnaces of up to thermal power of up to 5 MP, for which permit is not require or the integrated permit	the amount of the used petrol based on the division for a particular local administrative district, kind of used fire grate in the coal and coke furnace, a kind of used oil and gas, the nominal thermal power of the furnace,
for combustion engines	the amount of used petrol based on the division of 'age', the type of the engine in a vehicle or a machine- the table includes 32 differentiating entries
for fish farms	the kind of raised poultry, the way of poultry farming (battery cages, without cages, with mechanical waste drying, or mulched raising)

Source: my own research based on rozporządzenie MŚ w sprawie wzorów wykazów..., Dz. U. 2009 nr 97 poz. 816

The moment of the event description in the operative record should result from the accountancy policy of the company, with the reservation that the comparison of data resulting from the operative record and data recorded in the accountancy record should be ensured. Charges for a particular use of environment components will be calculated on the basis of the data gathered in the process of an operative record.

For the management purposes the above record yields the data which for example informs about an old manufacturing technology causing excessive pollution emissions which places the burden on the entrepreneur, the age of the transport fleet, the environmental "friendliness" of the used materials, raw materials, or the water management. It gives a view to the increasingly effective operations of "end of the pipeline" industries; meaning the ones that neutralize or reduce already generated pollution e.g. sewage processing plants, landfill sites, etc. [Famielec, Broniewicz 2006].

The accounting record of events connected with environmental charges will depend on:

- making an appropriately detailed record of accountancy documents confirming the purchase, wear and use of materials in processes causing the environment use e.g. the cost of the fuel for vehicles, manufacturing machines and other appliances with combustion engines, the cost of the lacquer in the manufacturing process and so on (the value resulting from detailed accounts should be in accordance with the data recorded in the operative recording after appropriate calculations for a particular kind of the event that can be measured qualitatively and quantitatively).
- keeping a record of charges for the environment use according to the
 place of generation of such costs dependent on the process from which
 the charge has been calculated, the records should be detailed enough
 to enable checking and confirmation of these figures together with
 calculated charges according to operations records.

Charges for the environment use can be part of the following components of the entrepreneur's property: costs of the completed development works, assets, assets under construction, investment real estate, finished products, semi-finished products, production under way as well as long term contracts.

With regard to the liabilities there arises a question if the amount of the charges for environment use is an outright obligation or a passive settlement of accrued expenses. The analysis of the regulations concerning accounting tend to suggest that the calculated monthly charges should be of a guaranteed nature and not one in question . The frequency of payment should be regulated according to accounting rules for a company. It seems justifiable to accept this solution based on a monthly calculation and recording of charges, especially

in light of the fact that the charges can have influence in estimating the costs of the finished products or offered services.

Environmental charges are an ecologic obligation otherwise resulting from past events where there existed a duty to establish a reliably determined value of the negative effects of business units in an environment that will use the current or future assets of the entity [Famielec, Stępień, Informacja...2005]. The environmental charges are a public-legal obligation that is subject to restrictions of the legal regulations of the Tax Ordinance Act (Ordynacja podatkowa).

The component parts of the environment use can be an element of the cost of manufacturing the products or offered service. The definition of the cost generation that is included in the accountancy regulation as well as the standpoint of the Accountancy Standards Committee (Komitetu Standardów Rachunkowości) [Dz. U. MF 2007 nr 2, poz. 11] lets one state that the environmental charges can be its component. The charges can be connected with immediate or indirect costs of manufacturing, or they can make up this cost on their own. Similarly, they can also be an element of unused manufacturing capabilities.

The use by the entrepreneur of the gathered information within the legal framework and duties for the management purposes is possible or even advisable. It should be stressed that particular competences of the enterprise let one define the areas giving it a competitive advantage over its competitors. They can deal with among others an environmentally friendly way of manufacturing that is not employed by competitors, which enables energy reduction and material use or reduces taxes and environmental charges [Famielec, Stępień, Informacja...w zarządzaniu, 2008].

4. An example of calculating charges for gas and dust emissions into the air

In order to show a complex nature of calculating and reporting of environmental charges an example of calculating the charges connected with pollution emissions into the air will be presented. It will show, though within a limited scope, what information every economic entity has to fill in the specification tables prepared by the Environment Ministry, which make up the report submitted to the Chairman of the local government of Malopolska Province.

Example 1

Assumptions:

In the last six months of 2011 the entrepreneur identified the following processes causing pollution emissions into the air resulting from the business activity in Cracow.

- 1 welding in the workshop,
- 2 emissions from a furnace with thermal power of 9 MW, a mechanical fire grate and natural draught, burning black coal.

In this period the entrepreneur:

- 1 used 5.000 electrodes for welding in the open air
- burnt 100 tones of black coal with energy of 24000 kJ/kg, containing 20% ash and 0.5% sulphur, the installation is equipped with a cyclone separator with 99% efficiency, and the content of combustible particles makes up 25% (the economic entity does not have a required permit for gas and dust emissions; therefore there appears an obligation for calculating higher charges).

Establishing of the entrepreneur's duties

In connection with environment use, the entrepreneur is obliged to fill in the form defined in the attachments 1 -5 of the announcement of the Environment Minister dated 18th June, 2009 according to specified formulas ...[Dz. U. 2009 nr 97 poz. 816] as well as to submit the report to the Chairman of the local government of Malopolska Province and the local Environmental Protection Office. Data concerning pollution emissions into the air should be recorded in attachments 1 and 2 which consist of 5 Tables (A, B, C, D, E). Table A includes, among others, information about: the location where the installation is used, the kind of installation, the kind of the protection installation used, the permit for emissions, the amount of used emitters, the amount of emissions divided into detailed substances as well as the amount of charges. Moreover, fuel characteristics should be included.

The calculation of the emission amounts and charges connected with welding and furnace Welding: the kind and amount of substances emitted into the air during welding of a given type of electrodes can be defined on the data given by the electrode manufacturer. Table 3 shows the calculation of the emission amount and due charges for the emission.

Table 3: Calculating the amount of charges for emissions during the welding process

Emission from one o	the amount	of emission	the amount of the	total sum	
substance	the amount [mg]	used electrodes [numbers]	total emission [kg] (2 x 3)	charge per unit for gas or dust [PLN/kg]	of the charge [PLN]
1	2	3	4	5	6
(NO2) nitrogen dioxide	80	5 000	0.40	0.48	0.19
(CO) carbon monoxide	30	5 000	0.15	0.11	0.02
other dust	900	5 000	4.50	0.52	2.34
Total:	X	X	Х	X	2.55

Source: my own study on the basis of the carried out research; ustawy o swobodzie... Dz. U. 2007 nr 155, poz. 1095 (ze zm.)

Furnace. The entrepreneur does not have an appropriate analysis of gas and dust emissions into the air from the used furnace; therefore in order to estimate the amount of emissions they can use the indicators included in the information-instruction manuals issued by the Ministry of Environmental Protection, Natural and Forest Resources (currently the Ministry of Environment) [April 1996], still in force. The substance emissions generated by burning black coal in furnaces with thermal power of 3-12 MW and with a mechanical fire grate together with charges calculations are included in Table 4.

Table 4. Calculations of the amount of the charge due to the furnace pollution emissions into the air

Emission from to a mechanical f thermal power of	ire grate.	the amount of emission		the amount of the	the	total amount	
substance	the indicator of emission [kg/Mg]	indicator emission		charge for gas of dust per unit [PLN/ kg]	charge higher by 500%	of the charge [PLN] (4 x 6)	
1	2	3	4	5	6	7	
(SO2) sulphur dioxide	16*s	8	800.00	0.48	2.88	2 304.00	
(NO2) nitrogen dioxide	4	4	400.00	0.48	2.88	1 152.00	

Emission from the hearth: a mechanical fire grate. thermal power of 3-12 MW		the amount of emission		the amount of the	the	total amount
substance	the indicator of emission [kg/Mg]	the indicator of emission [kg/Mg]	total emission 3x100 Mg [kg]	total for gas emission of dust 3x100 Mg per unit		of the charge [PLN] (4 x 6)
(CO) carbon monoxide	10	10	1 000.00	0.11	0.66	660.00
(CO2) carbon dioxide	2 100	2 100	210.00	0.26		54.60
dust from fuel combustion	2.5*Ar_sk	0.67	67.00	0.32	1.92	128.64
soot	0.004*Ar	0.08	8.00	1.32	7.92	63.36
benzo(a)pyrene	0.0016	0.0016	0.16	340.58	2 043.48	326.96
Total:	X	X	X	X	X	4 689.56

Explanation for calculation in Table 4:

s- total sulphur content expressed in percentage

Ar – ash content expressed in percentage

Ar_sk – ash content expressed in percentage corrected in accordance with the device efficiency and the content of combustible elements in dust: $Ar_sk = 20 \times (100-99)/(100-25) = 0.27$

- column 6: the amount of the charge per unit taken from Table G of the announcement by the Environment Minister dated 4th October, 2010 made higher by 500% (due to the lack of the permit), it does not apply to CO2 (carbon dioxide) because this substance is not present on the list issued in the announcement by the Environment Minister with regard to reference ...[Dz. U. 2010 nr 16 poz. 87]

Source: my own study on the basis of the carried out research; ustawy o swobodzie... Dz. U. 2007 nr 155, poz. 1095 (ze zm.)

The total amount of charges for pollution emissions into the air makes up 4,692.11 PLN in the presented case and should be rounded to full PLN.

The calculated charge of 4,692 PLN should be paid to the bank account of the local government where the use of the environment takes place, in this case it is the local government of Malopolska Province.

In the case of lack of payment for the environmental use by the entrepreneur or suspicions relating to the reliability of its calculation, the charge will be calculated by the Chairman of the local government through the administrative procedures, and its amount will be established according to their own decisions or the results of the control by the local inspector from the environmental protection offices.

⁻ column 2:

5. The examination of MSP sector entrepreneur's knowledge about the obligation to calculate and report environmental charges

Every economic entity making use of the environment, no matter to what scale or the size of the entity, is obliged to maintain records and report this fact. Every entrepreneur using the environment should:

- recognize the processes leading to use of the environment
- establish the scale to which the environment is used (e.g. the amount of emissions, fuel consumption), which requires maintaining appropriate records.
- calculate charges for the environment use,
- fill in appropriate tables
- submit the report and pay the charges (if they exceed the amount of 400 PLN for the component) to appropriate local governments by the end of the month of each 6 months' period.

For the purposes of this paper in February and March, 2012 the pilot study (in the form of a research survey) was carried out in the region of Malopolska Province among MSP entrepreneurs; the aim of the research survey was to examine general knowledge about duties resulting from the use of the environment within the scope laid down by the legal regulations concerning environmental protection in force since 2002. The research was conducted in the form of a questionnaire. One hundred entrepreneurs (who were eager to participate) were surveyed (the invitation was sent to 185 entrepreneurs). They were the clients of 4 accountancy offices run in Kraków from which 93 are a micro businesses, 3 are small ones and 4 are medium size ones.

The research was addressed to MSP entrepreneurs. From the perspective of a several years' experience as a tax adviser and chartered auditor of the author, it can be said that it is a group which uses the environment on an insignificant scale; in principle, it does not have any duty to pay charges for environment use.

During the survey the respondents explained, to eliminate any doubt, whether they understood the term 'charges for environment use', and what they understood to be "use of the environment" which would require a company to record and report their activity. The survey was carried out in the presence of a tax accountant representative of the entrepreneur for verification purposes in the case that the data was taken from the tax records.

Table 5. A list of results of the research survey concerning general knowledge of duties connected with charges for environment use by MSP sector entrepreneurs

		The si	ze of the e	nterprise
Questions and	l answers	Micro ¹⁾	Small ²⁾	Medium ³⁾
Is the entrepreneur aware of his duty to record and report any	Yes, one knows them and carries them out	5	1	3
charges for the environment use?	Yes, one knows them, but does not carry them out, because one thinks they are too big a burden for the business run by them	22	2	1
	No, one does not know them and therefore does not carry them out	59	-	-
	No, one does not know the duties and is not interested in getting to know them	7	-	-
Has the entrepreneur submitted the report for the environment use in 2011 to the Chairman of the local government and	yes	5	1	3
the Local Inspectorate of Environment Protection (WIOŚ) ?	no	88	2	1
Has the duty to pay the environment charges arisen, i,e. has the amount of these charges exceeded 400 PLN in any one month over a six month period?	yes ⁴⁾	4	-	-
	no ⁵⁾	89	3	4
The period of the economic entity's business activity	the period in years	1 to 25	4 to 15	10 to 16
childy o outsidess activity	the average period in years	7,5	9	12

¹⁾ micro: - (i) - employs fewer than 10 workers and (ii) its annual turnover does not exceed € 2 million or the total annual balance does not exceed € 2 million

²⁾ small: - (i) employs fewer than 50 workers and (ii) its annual turnover does not exceed 10 million or the total annual balance does not exceed € 10 million

³⁾ medium size: - (i) employs fewer than 250 workers and (ii) its annual turnover does not exceed \leqslant 50 million or the total annual balance does not exceed \leqslant 43 million

⁴⁾ the obligation was created with the economic entity that did not submit the report and did not pay the charges, the amount of the charges was calculated by the respondent on the basis of the estimated amount given by the questioned person in response to the

- question of the respondent about factors/ processes causing the environment use, which can appear in the company with regard to PKD (the Polish Classification of the Business Activity).
- 5) the lack of the obligation resulted from the specification tables or was calculated by the respondent on the basis of the estimated data given by the questioned person in response to the question of the respondent about factors/ processes causing the environment use, which can appear in the company with regard to PKD

Source: my own study on the basis of the carried out research; ustawy o swobodzie... Dz. U. 2007 nr 155, poz. 1095 (ze zm.)

The list of the results of the questionnaire is shown in Table 5 (the numbers in the table correspond to the number of the questioned respondents in particular groups). The research shows that only 9% of the surveyed entrepreneurs know their obligations connected with the environment use, 25% knowingly do not fulfill the obligation, 59% do not know about it, and 7% are not interested in getting to know their obligation. It is worth pointing out that they are not 'young' entrepreneurs. Therefore the lack of knowledge concerning obligations which they should be bound to for quite a while is indeed one of great concern.

The very fact makes one wonder about the sense of finding legal solutions, which are at best not respected, and executing them through inspections, seems to be impossible at present in light of the costs associated with such inspections.

It is worth noting that only 4% of the surveyed entrepreneurs slightly exceeded the limit obliging them to pay charges for the environment use. For example an entrepreneur having a fleet of 5 vehicles registered since 2005 or having the EURO 4 certification with a petrol engine, would have to burn about 90.000 liters of fuel (the average daily use about 490 liters of fuel) during a period of 6 months to exceed the limit of 400 PLN and pay the environmental charge. Even if the entrepreneur did not exceed the limit, above which the charge is to be paid, they would have to submit a report indicating the amount calculated no matter what the amount would be. In example 1 the entrepreneur would be obliged to submit a report concerning a charge of 3 PLN resulting from welding if it was the only process which would generate the emission into the air in the last 6 months' period of 2011.

6. Modification suggestions concerning the reporting of environmental charges for MSP sector entrepreneurs

As one can notice the operative record that deals with calculating environmental charges is very detailed due to the information which is to be supplied in a report. In case of entrepreneurs who do not exceed the legal regulation limit of 400 PLN for the use of any of the components of the environment and the kind and scale of the business activity show that the environment is used in an insignificant scope, one should consider solutions simplifying recording and reporting obligations.

The discussed issue mainly deals with entrepreneurs belonging to a micro and small businesses group which are not included in legal regulations about accountancy. Moreover, entrepreneurs paying income tax in the form of a fixed amount (karta podatkowa) or a lump sum do not keep any tax records including calculation of costs. They do not have to record the use of materials or resources, but they must maintain revenue and expense records (podatkowa księga przychodów i rozchodów). They often do not have any detailed information about the kind of the costs involved and very often they are not interested in this subject. Filling in specification tables and additional recording is perceived as too heavy a burden; in addition, there is another reporting obligation which takes up time and does not create an incentive to protect the environment as it does not apply any financial burden. It is worth pointing out that the number of micro businesses at the end of 2010 amounted to, according to GUS (Central Statistical Office), 1,716.3 K out of 3,909.8 K registered companies; therefore it can be supposed that a significant number of economic entities using the environment do not fulfill the reporting obligations.

A proposal which can be considered in this respect and which requires a change in the present legal regulations is the use of an analogous solution similar to the income tax settlement of businessmen who pay fixed amount taxes (karta podatkowa). The present complicated way of calculating charges could be replaced with a simplified method. The entrepreneur would be obliged to calculate the amount of the environmental charges, e.g. on the basis of the main business activity carried out in the tax year, the number of vehicles, the number of heated buildings and facilities. It would require that the Environment Ministry develop a table fo charges depending on the above mentioned parameters. Thus the calculation of charges would be simplified; it would not be necessary to keep detailed records of factors and the identification of processes leading to environmental use.

The calculated charge would be declared in annual income tax returns which each entrepreneur is obliged to file. This fixed charge would not be subject to any reductions or exemptions. The Revenue Office would be a collector and would transfer the charge to the local government which would handle its further distribution.

The carried out questionnaire included the above suggested proposal, and the entrepreneurs were asked about the acceptance of the lump sum charge calculated in the described way as well as about its upper limit. Among those surveyed 100% were in favour of the lump sum charge of PLN 100 for the environment use annually, which would be differentiated according to the kind and scale of the business activity and which would replace the present system of recording and reporting obligations.

7. Conclusions

Environmental charges together with factors leading to them deserve to be examined (in detail) and accounting of entrepreneurs should be taken into consideration. This would provide a more informative basis, which could be the basis for decisions connected with activities aimed at modernizing existing equipment, using more environmentally friendly materials, modifying the sewage processing system, and such, which would very quickly improve quality, etc.

However, it requires a lot of work input, and as a result more expense. There is also no point in doing it in each individual company. In enterprises using environmental resources on a large scale it seems justifiable from a managerial point of view to keep extensive accounts connected with activities generating charges, and it is also the basis for calculating the appropriate amount of charges.

For the MSP sector entrepreneurs where the scale of the environment use is insignificant, research carried out points to the fact that the economic entities do not know their recording and reporting obligations connected with the environmental charges. In cases where they are aware of their obligations, most do not pay charges as they do not exceed the limit of the amount exempted. In the sample of surveyed entrepreneurs only 4% would slightly exceed the exemption limit and as a result they would be obliged to pay the charges. It seems that the same recording and reporting obligations for economic entities which use the environment on a large and an insignificant scale are not justifiable because of the work costs involved. The simplified way to calculate environmental charges for some economic entities and not using exemptions in this respect should bring about the equal chances for the competitiveness of the entrepreneurs who comply with the obligations resulting from the Environment Protection Law with those who do not comply with them.

References

- Drury C. Rachunek kosztów, przekład pod kierunkiem A. Jarugowej, PWN. Warszawa 1996.
- 2. Famielec J., Stępień M., *Informacja ekologiczna w zarządzaniu*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków 2008.
- 3. Famielec J., Stępień M., *Informacja ekologiczna w ujęciu finansowym*, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków 2005.
- 4. Famielec J., Broniewicz E., Odzwierciedlenie aspektów ochrony środowiska w sprawozdawczości małych i średnich przedsiębiorców w

- *świetle ustawy o rachunkowości*, Opracowanie na zlecenie Ministerstwa Gospodarki, Białystok Kraków 2006.
- 5. Małecki P.P., Kontrowersje wokół definiowania podatków i opłat ekologicznych [w:] Finanse jako przedmiot badań interdyscyplinarnych, red. S. Owsiak, Wydawnictwa Akademii Ekonomicznej w Krakowie, Kraków 2007.
- Małecki P.P., Opłaty ekologiczne w Polsce Analiza i ocena za lata 2002-2007, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków 2009.
- 7. Materiały szkoleniowe Urzędu Marszałkowskiego Województwa Małopolskiego Departament Budżetu i Finansów Wydział ds. Opłat za Korzystanie ze środowiska, szkolenie pt. Opłaty za korzystanie ze środowiska, opłata produktowa i opłata za substancje kontrolowane, 12 stycznia 2012.
- 8. Nowak E., *Rachunkowość kurs podstawowy*, PWE, Warszawa 2002.
- 9. Obwieszczenie Ministra środowiska z dnia 4 października 2010 r. w sprawie wysokośi stawek opłat za korzystanie ze środowiska na rok 2011, MP 2010 nr 74, poz. 945.
- 10. Ocena funduszy ekologicznych w świetle dalszego ich funkcjonowania w Polsce, red. K. Górka, P.P. Małecki, wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków 2011.
- 11. *Podstawy ekonomi środowiska i zasobów naturalnych*, red. B. Fiedor, C.H. Beck, Warszawa 2002.
- 12. Rozporządzenie Ministra środowiska z dnia 26 stycznia 2010 r. w sprawie wartości odniesienia dla niektórych substancji w powietrzu, Dz. U. 2010 nr 16, poz. 87.
- 13. Rozporządzenie Rady Ministrów z dnia 14 października 2008 r. w sprawie opłat za korzystanie ze środowiska, Dz. U. 2008 nr 196 poz. 1217.
- 14. Rozporządzenie Ministra środowiska z dnia 18 czerwca 2009 r. w sprawie wzorów wykazów zawierających informacje i dane o zakresie korzystania ze środowiska oraz o wysokości należnych opłat, Dz. U. 2009 r. nr 97 poz. 816
- 15. Strona internetowa: www.malopolskie.pl/srodowisko, stan na dzień 21.04.2012.
- 16. Stanowisko Komitetu Standardów Rachunkowości, Dz. U. Ministra Finansów 2007 nr 2, poz. 11, jako załącznik do uchwały nr 1/07 Komitetu Standardów Rachunkowości z dnia 16 stycznia 2007 r. w sprawie przyjęcia stanowiska "Ustalanie kosztu wytworzenia dla celów bilansowej wyceny zapasów".

- 17. *Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska*, tekst jedn.: Dz. U. 2008 nr 25, poz. 150 (ze zm.).
- 18. *Ustawa z dnia 2 lipca 2004 r. o swobodzie działalności gospodarczej*, Dz. U. 2007 nr 155, poz. 1095 (ze zm).
- 19. *Ustawa z dnia 27 kwietnia 2001 r. o odpadach*, tekst jedn.: Dz. U. z 2010 nr 185, poz. 1243 (ze zm.).
- 20. Ustawa z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji, Dz. U. 2009 nr 130, poz. 1070 (ze zm.).
- 21. Wskaźniki emisji substancji zanieczyszczających wprowadzanych do powietrza z procesów energetycznego spalania paliw, Materiały informacyjno instruktażowe, Ministerstwo Ochrony Środowiska Zasobów Naturalnych i Leśnictwa, seria 1/96 Warszawa, kwiecień 1996.
- 22. Zmiany strukturalne grup podmiotów gospodarki narodowej w rejestrze regon, 2011 r., GUS Departament Metodologii, Standardów i Rejestrów, Warszawa 2012.

Ludmiła Kryskova*

ANTI-CRISIS ACTIONS OF GOVERNMENT AND CENTRAL BANKS

Abstract

This work presents the phenomena of crisis as based on its definitions in psychology, psychiatry and economics, describes the phases of economic cycles as well as the forms in which crisis may occur. Various instruments used in anti-crisis actions of states are discussed with a distinction between those applied by governments and central banks. The empirical part deals with characteristics of anti-crisis instruments as used by selected EU countries.

Key words: Anti-crisis actions, crisis, instruments of the Anti-Crisis Actions, anti-crisis actions in the EU.

1. Introduction

Although crisis in economy is an objective phenomena, sometimes it is too strong and therefore needs to be solved with the state's assistance. Despite its common use, this category has no uniform definition. The notion of crisis is mostly developed in psychology and psychiatry from which the knowledge and experiences are applied to the economy. The mechanisms mostly used by governments and central banks are of interventionist character and take forms of various anti-crisis actions. The actions taken by governments and central banks are implemented through the use of various instruments. The specific characteristic of such anti-crisis instruments is that they are an autonomous domain of states and the only possible way of reacting in a situation where the market fails.

This paper aims to define crisis in the economy, to identify the instruments used by governments and central banks and to describe the characteristics of these actions.

The thesis of this work is that governments and central banks counteract the crisis by means of various anti-crisis action instruments.

^{*} PhD student, Faculty of Finance, Cracow University of Economics.

The first part of this article deals with the definition of crisis as a psychological and psychiatric phenomena. It is followed with the description of the phases of an economic cycle, the definition of an economic crisis and its various forms. In the second part various instruments used in the state anti-crisis action are presented, with distinction between the instruments of governments and those of central banks. The third part contains characteristics of anti-crisis instruments (saving measures of the public sector, changes in tax rates, stimulation packages, initiation of public works, warranties and bank capitalizing among others) with the examples of selected EU countries. The object of the research was the use of the existing anti-crisis instruments in anti-crisis actions carried out in the selected EU countries. The subject of this research were the following selected EU countries: Hungary, Greece, Ireland, Portugal and Poland, all of which have applied these instruments in their anti-crisis actions. The method used in this work was mainly analysis of existing literature, reports and statistical data related to the subject of work. The ration of public debt to GDP is used in this work as the measurement of public finance debt. This article refers mainly to the debt crisis in Europe and, to a lesser extent, also to the economic and social crisis. The countries, on which this work elaborates in the third part, were the ones which turned to the EU for help as they were the ones mostly affected by the crisis. In these countries various instruments were applied on different levels in a specifically active manner. Poland was chosen as an example of a country that did not use EU assistance programmes. It needs to be clarified that some of these countries managed to rely only on their own internal financing for their anti-crisis actions, and others had to use the external assistance in the form of the EU assistance programme instruments (EFSM, EFSF).

The sources used for this work include subject literature, scientific and expert publications referring to the issue of crisis and anti-crisis actions undertaken in 2007-2012, reports and publications of European and country-level institutions as well as internet websites which deal with the subject of this article.

2. Crisis as a phenomenon in psychology and the economy

The word crisis is one of the most used words in science as well as in everyday life. It is a fashionable word, overused in the context of human poverty, suffering and pathology.

It may denote suffering but also a way of life in its social, economic as well as political meaning. The origins of the word *crisis* may be traced down in the Greek language, where it has positive connotations. It means a turning point in sickness, a decisive moment in a tragedy, a time of peril. It means a shock, but one leading to a breakthrough which can be achieved by choice, a solution

(presumably successful, effective). Among various usage of this word in social domains of life the dominant meanings are those of a crisis of values, crisis of family, crisis of international relations, crisis of identity as well as crisis of public finances.

Psychology and psychiatry are two scientific domains particularly prolific in conceptualising definition of crisis. The article written by E. Lindemann (1944), regarding symptomatology and treatment of acute illness, is particularly appraised in this respect [Lindemann 1944, nr 101]. This work provides a regular description of the experience of undergoing an extremely traumatic situation. It promotes crisis intervention as a form of assistance to grief-stricken people. This category became defused to all areas where the occurrence of crisis has been diagnosed, such as: barriers in achieving important professional goals, failures in overcoming life difficulties, feelings of lacking control over one's life.

L.M. Brammer (1985), who is a psychological assistance practitioner known in Poland, defines crisis as a state of disorganization, in which people experience frustration in reaching important life goals or deep disturbance in their life cycles, as well as failure in their ability to deal with stress. The consequences of such disturbances, namely fear and shock, are the focus here rather than simply disturbance itself. Several American authors of a manual on crisis intervention defined crisis as a way of perceiving a certain event or a situation of unbearable difficulty so as to require methods and mechanisms of dealing with it which exceed those available to the affected person. Unless the person experiences relief, this crisis may cause serious disturbance in functioning in affective, cognitive and behavioural areas [Gilliland and James 1993]. A more contemporary psychological concept defines crisis as a temporary state of internal imbalance, triggered by a critical event or life events requiring considerable changes and solutions [Badura-Madej 1996]. The evaluation of these concepts leads to the conclusion that the essence of crisis is not the traumatic event or difficult situation but one's subjective reaction to it. It is expressed by a specific perception, emotional and sensitive reaction which are the basis of crisis behaviour. The optimism of such situations lies in intervention actions! Therefore, W. Badura-Mazur points out that, among other issues, crisis theory is an optimistic theory [Badura – Madej, wyd. cyt.].

The authors of psychological concepts of crisis underline the following points as characteristic of this phenomenon [Gilliland and James 1993]:

- The presence of threat as well as odds;
- complicated symptomatology;
- the presence of the seeds of growth and change;
- the necessity of making a choice, decisions regarding further actions;

• universality (commonality, imbalance, everyone can get into a crisis) and idiosyncrasy (a problem seemingly difficult for one person is an absolute catastrophe for another, despite the fact they face the same situation and, thus, confirming the subjective character of crisis).

The strategy of intervention (assistance) should be directed towards minimizing the experience felt by a person in a state of crisis. The most important actions in the mechanism of crisis are: registry of basic ways of coping with difficult situations, searching for information, assistance, keeping up appearances, communicating, avoiding and waiting till the end. In the selection of coping methods the educational aspect is more important than the therapeutical.

The expanded crisis theory indicates that the properties and ways of acting on higher organizational levels cannot be explained by summing up the properties and ways of acting, their components being measured separately. However, if we know the set of components and the relations between them, higher organizational levels can be explained through their elements. Then the systems remain in mutual relationships with other systems.

This type of crisis conceptualisation is very useful for defining and selecting intervention methods in relation to the economy and its subjects. The economy develops in so called economic cycles. These cycles mean that there are fluctuations in various economic parameters which characterise levels of an economic cycle. These cycles began to occur first in countries possessing the most highly developed capitalistic systems (first in England, then in the USA). Sometimes they originated in one economic branch, for example in US agriculture. Later on, as a result of industrialization. Economic cycles are neither regular, nor uniformly strong in all branches of the economy. It may happen that one branch functions well whereas other branches go through crisis).

An economic cycle is a macroeconomic element and repeats itself periodically. There are two types of economic cycles: classic and contemporary. A classic economic cycle consists of four phases: proper crisis, subsequent recession, recovery and expansion. The proper crisis phase is characterised by a sudden decrease in economic activity. The assumed causes behind the crisis are: supersaturation, overproduction, a sudden drop in prices of goods, services and wages, exchange rates of securities, lack of liquidity, an increase in unemployment, bankruptcy of many enterprises and especially small ones. After the crisis phase there is depression, which is characterised by stabilisation of economic activity on a low crisis level. Decreasing tendencies are curtailed, large-scale unemployment still persists, there is a general stagnation and there is no increase in economic activity. An increase appears only in the recovery phase, which manifests itself with an increase in production plus an improvement in all other rates of the production processes. Following the recovery phase, there

is an expansion phase, which is characterised by an increase in production, prices, employment, wages, profits and other incomes. The normal complete cycle is the period between two subsequent crises which encompass the four phases described above. Based on observations it may be stated that the normal cycle may take between 4 to 11 years [Rutkowski 1972, s 464].

A contemporary economic cycle consists of two phases: expansion and recession. This cycle is characterised by a lack of deep crises caused by the countercyclical influence of the state. In the economy expansion is distinguished by an increase in production and recession by stagnation leading to economic slowdown measured mostly by GDP. The recession is short-lived and appears in an economic cycle [Famielec 2010, s.327]. Recession is caused by credit expansion taken by the banking system without proper support from other business entities not usually interested in increasing their savings [Huerta de Soto 2009, s.302].

In classical literature, crisis is described as a symptom of the particular accumulation of all economic contradictions typical for a capitalistic economy. In the crisis phase there exist phenomena which lead in consequence to the economy achieving another state of 'balance'. As a result of overproduction current increments in production decrease, which leads to a reduction in their reserves. Decreasing production is also favoured by functioning of lower prices which facilitate the sales of surplus goods. A decrease in prices is helpful for overcoming a crisis, while a decrease in production costs and improvement of the production process leads to an increase in demand for new means of production. Depreciation of fixed capital is a result of capital use and causes the necessity of its renewal. This leads to a recovery in production and employment. Economic activity is restored and transformed into an economic boom, which usually ends after some time with a new crisis [Grabowski 1971, s 324]

Within the economy the following forms of crisis may be distinguished: an economic crisis – characterised by lowered standards of living; a financial crisis (debt-related) – consisting of excessive indebtedness measured as a value of public debt to GDP; a political crisis – which may manifest itself with a break in completion of certain policy; a social crisis – as a phenomena of overlapping social tensions and conflicts. Often the above mentioned phenomena occur simultaneously, forcing the state to provide assistance [Rybiński 2012, s. 70].

The main focus of this work is the financial crisis (public finance crisis). It denotes a situation where the stability of the public finance of the state is at risk and where effective use of fiscal instruments becomes very problematic.

3. Instruments of Anti-Crisis Actions of Governments and Central Banks.

A crisis, from both a psychological and economic perspective, requires taking remedial measures. Looking from the latter perspective, such measures may be taken by governments and central banks which have adequate instruments for anti-crisis actions at their disposal.

The assistance of various units, including states, is a natural element accompanying a crisis especially when the market system fails.

Market failure is a situation in which the application of market mechanisms does not bring the desired effect. Unsuitable and ineffective allocation of resources occurs and thus the necessity occurs to correct some of the effects of the market mechanism, such as: ineffectiveness (imperfect competition, monopolies, negative external effects), inequality of earnings, instability of the economy (recession, economic fluctuations, low pace of growth, unemployment) [Drozdowicz 1998].

In the period of free-competition capitalism the economic role of the state was very small because of the self-regulating mechanism of the economy which restored the disturbed balance. The economic policy of contemporary capitalist states requires the application of active assistance measures [Rutkowski, wyd. cyt.] in a situation where the market fails. The issue of state's participation in the economy, especially of the active stabilization policy, was addressed earlier by Keynes. He is also the author of the theoretical bases of state interventionism, which is defined as the excessive activity of state (government, state's administration) consisting of creating an institutional environment for the actions of various entities of the social domain. In a contemporary economy we can distinguish three basic functions of the state: allocation, redistribution and stabilization. Allocation constitutes taking actions leading to the optimal allocation of economic resources through development of economic and social infrastructure, structural and preventive policies. Their redistribution and stabilization functions are related to the macroeconomic policy of the state. Their role is: to limit recession, unemployment and inflation; to maintain high economic growth in the long term and market equilibrium. The macroeconomic role of the state is fulfilled within the framework of fiscal and monetary policies. Fiscal policy, called also budgetary policy, consists of regulating the level of taxes and state expenditures. Fiscal policy, on the other hand, ensures financing public expenditure and functioning of the tax system. Macroeconomic policy aims to achieve economic growth, stabilization of prices, countering unemployment and inflation, equilibrium in the balance of payments as well as the effective

division of economic resources [Drozdowicz wyd. cyt.]. The state carries out anti-crisis actions through specific policies included within the scope of economic policy [Informacja dotycząca...2009]

- budgetary policy of the state encompasses state actions related to expenditures and revenues, regulating their levels, structures and mutual proportions. This policy aims at decreasing the budget and looking for budgetary savings or increasing the budget deficit and financing the stimulating anti-crisis actions at its expense;
- tax policy focuses on simplification of the tax system, limiting or increasing the tax loads on persons and business entities, as well as reducing or increasing the tax rates;
- investment policy consists of actions taken through state investments, including the creation of a strong public sector by investing in certain domains of economic life aimed at, among others, increasing employment without increasing the supply of goods and services;
- social policy aims at solving social problems which might be related to unfavourable economic phenomena;
- structural policy entails supporting and protecting the small to medium size enterprises sector as well as regions especially exposed to the effects of crisis;
- guarantee-crediting policy is aimed at stimulating consumption and investment demand. It leads to improvement in the availability of credit by undertaking appropriate actions and by expanding the warranty and guarantee system in order to increase confidence in banks and a larger turnover.

Within the above mentioned specified policies, the state uses anticrisis action instruments. These may be implemented by governments or central banks, and as such are presented in Table 1.

Table 1. Anti-crisis actions instruments of government and central banks

GOVERNMENT	NAME OF SPECIFIC POLICY	INSTRUMENTS OF ANTI-CRISIS ACTIONS
	budgetary	• saving actions of the public sector
	tax	tax exemption;tax allowance;change in tax rates;
	investment	public investments. initiation of public works;
	social	 support for self-employment; legalization of work; matinaining work places; employment support programmes.
	structural	guarantee package for entrepreneurs; foreign investment financing; aid packages for SMEs; reducing worker's social insurances paid by employers; accelerate depriciation write-offs when purchasing investment funds; stimulating packages; subventions; subsidies.
CENTRAL BANK	Guarantee-crediting	providing banks with capital;bank guarantees;interbank transaction warranties.

Source: compiled by L. Kryskova, based on: [Informacja dotycząca działań antykryzysowych podejmowanych w wybranych krajach świata, Ministerstwo Gospodarki, Warszawa 2009]

Apart from the above mentioned instruments, central banks may also apply active monetary policy using its tools to counter excessive economic fluctuations. These monetary policy tools include: open market operations, setting up purchasing power and interest rates adequate to the economic situation. The extraordinary influencing measures of central banks do not mean the creation of new instruments of monetary policy. These should be treated as separate methods which use the existing tools in more flexible manners, allowing for more accessibility and frequency of their use as well as cooperation among various participants of the financial market [Szambelańczyk 2011, s.24].

State interventionism results from failures of market mechanisms and is both supported and discouraged by economists. Opponents believe that the state should care for economic growth and not provide assistance. Due to the status held by the state in the economy and the tools that it has at its disposal, the role of the state is one of initiator of anti-crisis actions. These actions are indispensable for restoring balance to the disrupted market.

State intervention may be in the shape of plans and programmes which include a wide spectrum of measures addressed to specific sectors and social groups. They might also take the form of a set of a few instruments applied in a parallel way by the government and central bank in order to create a certain effect in the economy. The assistance provided by governments and central banks to counter a crisis should be understood as action programmes proclaimed by organizations of regional, international as well as global character, meant to be implemented by member states. These action programmes may act as guidelines, directives or may determine the direction for future alterations [Kawa 2012, s 78]. These actions are commonly known as anti-crisis instruments.

Anti-crisis actions should be also understood as initiatives undertaken on the international level in the form of special programmes and packages created by governments of various countries and organizations. It refers especially to countries which are, for example, tied together by economic or monetary cooperation.

On the international scale, some tendencies to reinforce control over financial markets may turn up within anti-crisis actions. These tendencies may also encompass newly proposed institutional solutions, long-term actions with the perspective of the world economy's returning to a growth pattern, financial transfers for the benefit of sectors mostly affected by crisis, use of the current crisis conditions for implementing corrections of economic processes towards innovation and economic effectiveness [Antykryzysowe programy...2011].

4. Characteristics of anti-crisis actions in the EU

For the analysis of specific cases of anti-crisis actions only those countries chosen which were most at risk and applied for external help: Hungary, Greece, Ireland and Portugal. Additionally, Poland was chosen as an example of a country which did not have to apply for such assistance.

The economic crisis from 2008 triggered disadvantageous occurrences in the European Union because the economies of highly developed countries are interconnected and dependent upon each other at various levels. The European Union was negatively affected by the results of the world crisis, which was caused by expansive policy, securitization, insufficient quality in risk management by banks and other financial institutions [Oreziak 2009, s. 119] This situation lowered the condition of some of the economies of EU member states. Some of them were not prepared to tackle some of the unfavourable

crisis manifestations, such as: economic downturn and decrease in GDP's growth, rising unemployment, a fall in the reliability of financial institutions and crediting policy difficulties related with it. Some of the countries facing these problems could not react themselves, specifically the countries of so called PIIGS group: Portugal, Italy, Ireland, Greece and Spain. Among 27 countries - the member states of the EU - some of them were harshly affected by the debt crisis. In a particularly disadvantaged situation were some of the countries – the members of the Eurozone – which operate under the common monetary policy of the European Central Bank. In some of the EU countries problems within the banking sector occurred, while in others difficulties turned up related to public finances. The problems with banking sectors defused as a result of a 'contamination' from highly developed countries to the less developed. As other segments of the banking sectors became influenced by the crisis, it effected the economy in real terms [Wojtyna 2011, s. 14]. According to K. Rybiński, the problems related to public finance occurred as a result of 'crisis of an excessive indebtedness in the private and public sectors', which triggered the enormous assistance of governments and central banks for financial institutions [Rybiński 2012, nr 14]. Part of the private sector debt turned into public debt, which began increasing at an alarming rate prompted by the instability of growth and smaller budget revenues. The measuring tool for debt crisis is the ratio of public debt to GDP and is presented in table 2.

Table 2. Public debt in selected EU countries in relation to GDP (in %)

COUNTRY	2007	2008	2009	2010
Austria	57.8	59.3	64.9	65.8
Belgium	85.3	90.1	94.9	96.8
Czech Republic	25.2	27.1	32.5	36.6
Denmark	27.8	32.3	37.9	39.6
Estonia	1.3	1.8	3.6	3.2
Finland	31.2	29.5	37.5	41.7
France	52.1	53.4	61.2	67.4
Germany	39.6	39.6	44.2	44.4
Greece	105.7	110.6	127.0	147.8
Hungary	61.6	67.7	72.8	73.9
Island	23.2	44.2	87.5	81.3
Ireland	19.8	28.0	47.1	60.7
Italy	95.6	98.1	106.8	109.0
Luxemburg	1.4	8.2	8.5	12.6
The Netherlands	37.6	50.1	49.7	51.8

COUNTRY	2007	2008	2009	2010
Poland	42.6	44.7	47.0	49.7
Portugal	66.6	68.9	78.7	88.0
Slovakia	28.1	26.3	33.7	39.1
Slovenia	23.2	21.2	33.6	36.0
Spain	30.0	33.7	46.0	51.7
Sweden	36.4	35.6	38.1	33.8
United Kingdom	42.7	61.1	75.3	85.5

Source: [http://stats.oecd.org (22.05.2012)]

The data gathered in table 2 lead to the conclusion that the highest public debt in relation to GDP was noted for: Greece (147,8%), Italy (109%), Belgium (96,8%), Portugal (88%), United Kingdom (85,5%). Some of these countries belong to the above mentioned PIIGS group, and were particularly affected by crisis symptoms.

The governments and central banks of specific countries undertook a number of anti-crisis actions, using for these ends instruments adequate to the economic situation. Additionally, as in answer to the deepening debt crisis, in some countries, especially in the Eurozone, the member countries, as well as EU institutions agreed upon an aid package of about 750 billion euros (including loans from IMF of 250 billion euros). Table 3. presents the approved and implemented programmes of financial assistance in the EU countries in the period between November 2008 and June 2011.

Table 3. Anti-crisis action instruments of selected EU countries in 2008 – 2011

Country	Anti-crisis action instruments	Amount in Euro	Financing source	Date of providing the aid
Hugary	 saving measures of the public sector; stabilization package was released for public investments; pension fee rates paid by employer were reduced (from 32% to 26%); increase in the CIT rate (from 16% to 19%); increase in the PIT rate (thresholds from 18% and 36% to 19% and 38%); increase in the VAT rate (from 20% to 23%); introduction of a new real-estate tax. 	€ 20 billion	€ 6,5 billion -Balance of Payments Support Instrument; €12,5 billion - IMF; €1 billion - World Bank	2008, payments within 2 years

Country	Anti-crisis action instruments	Amount in Euro	Financing source	Date of providing the aid
Greece	Government rescue plan: • budget saving measures, reductions of payments; • increase in taxes; • banks capitalization.	€ 110 billion	€ 80 billion -loans from countries of the Eurozone; € 30 billions IMF	2010, payments within 3 years
Ireland	 savings in administration maintainance costs and in public sector; increasing the tax deductions for expenditure of enterprises in R&D from 20% to 25%; full tax exemption in case of new enterprises; decreasing the tax from commercial real estate transactions from 9% to 6%; increasing the rate of the basic tax bracket; bank warranties for € 400 billion; Allied Irish Bank and Bank of Ireland were capitalised. 	€ 85 billion	€17,5 billion State Treasury and National Pensions Reserve Fund; €22,5 billion - IMF €22,5 billion - EFSM €17,7 billion - EFSM €4,8 billion- bilateral loans	2011, payments within 3 years
Portugal	 public investments; state warranties were granted for interbank loans in amount of € 20 billion, which is 11,7% of GDP; bank capitalization in amount of € 4 billion; the warranty sum was increased for bank deposits from €25 000 to €100 000. 	€ 78 billion	26 billion -EFSM 26 billion -EFSM 26 billion -IMF	2011, payments within 3 years
Poland	increasing the limit of guarantees and warranties for economy and financial market; creation of additional, secured credit action for the sector of SME; increasing investment relief for SME; accelerating the realisation of projects co-funded by EU; reduction and simplification of taxes: introduction of two-scale PIT, tax reform.	PLN 91,3 billion	Stability and Growth Pact	2009

Source: Compiled by L. Kryskova, based on: [Wancio 2011, nr 3 and Informacja dotycząca działań antykryzysowych podejmowanych w wybranych krajach świata, Ministerstwo Gospodarki, Warszawa 2009]

As is evident from the data in Table 3, countries resorted to various anti-crisis instruments. These actions were aimed at, among others, banking and finance sector, the real terms economy, legal actions, informative actions, financial transfers and were used in various periods of time. Moreover, instruments included in the specific policies were also used: budgetary policy (Hungary, Ireland, Greece), tax policy (Poland, Hungary, Ireland, Greece), investment policy (Hungary, Ireland), social policy (Hungary, Ireland), structural policy (Poland), guarantee-crediting policy (Poland, Portugal, Ireland and Greece). The level of financial help and the source of financing were depending on the scale of the problem in a particular country. The countries which received the highest aid level were: Greece (€110 billion), Ireland (€85 billion) and Portugal (€75 billion). In order to coordinate and successfully implement these actions there were two new instruments temporarily used, which served to protect the financial stability in some EU countries (according to table 3 these countries included Greece, Ireland and Portugal) [Wancio 2012, nr 2]:

- European Financial Stabilisation Mechanism (EFSM), which was formed on the basis of the EU Council directive of 11th May 2010. Financial assistance from EFSM was to be directed to all excessively indebted member states of the EU, but only those EU countries which did not belong to the Eurozone could use the balance of payments support instrument. The support was to be granted as a loan for the amount of €60 billion with EU budget's collateral.
- European Financial Stability Facility (EFSF), which is a special bond-issuing vehicle. Its role consisted in facilitating quick and efficient reaction in case of financial crisis in one of the Eurozone countries, as well as in preventing the crisis spillover into other countries of the Eurozone. It was established in the form of a limited liability company. It acquires financial means for providing assistance for the Eurozone countries by issuing its own bonds and other debt instruments, and it receives guarantees from the countries of the Eurozone (as well as Poland and Sweden) to cover its debts. The total amount of the guarantees is €440 billion and consists of the countries' contributions calculated proportionally to their paid-up capital shares in the European Central Bank.

Moreover, due to the need for a complex solution to the financial crisis in the Eurozone and a quick and effective reaction in case of crisis occurrence, a new permanent institution was formed: European Stability Mechanism (ESM). It will start functioning when the two currently operating instruments will expire, i.e. June 2013. It will service the part of loans which have not been paid nor financed as well as unpaid-off bonds. It will cease to operate when the assistance granted to the EU Member States is fully paid off and when ESM meets its own liabilities incurred by issuing of financial instruments. [Wancio, wyd. cyt.].

The assistance for the indebted EU countries described above raises a lot of controversies. The presented mechanisms EFSM and EFSF are supposed to help the most indebted countries of the Eurozone, including Greece, which received the biggest support from EU, as well as the whole EU economy. Unfortunately, not all of the assumptions of this strategy brought about desired effects. The critical situation of Greece caused the necessity for preparation of another aid packages, if which part comes from the Eurozone and IMF as well as from the private sector. In 2012 Greece, after long negotiations, received second aid package in the amount of €130 billion. As it was mentioned before, the total amount channelled in assistance for the EU countries reached €750 billion, unfortunately, in comparison to the public debt of the most indebted countries in 2011 (Greece: €352 billion, Portugal: €174 billion, Spain: €737 billion) the level of the assigned assistance is not very impressive [Wypłosz 2011, s. 18]. The measures taken by the EU does not fully solve the problems, however, most probably, they postpone the unavoidable consequences.

According to the treating which regulates functioning of the European Union, both the EU as well as the member states are not accountable for liabilities incurred by another member state. According to this law, countries which indebted their economies to high levels have no rights to demand financial assistance from other member states. The above mentioned treaty allows only for the possibility to grant financial assistance to a member state which struggles with difficulties caused by extraordinary circumstances beyond its control, for example due to natural disaster. In the Greek case, no such circumstances occurred, moreover, the situation was not caused directly by external factors, such as world financial crisis, global recession or speculative actions. Notwithstanding all this, the countries decided in favour for financial support. This decision to grant and continue assistance for Greece may become a dangerous process for all the Eurozone. It may lead to a situation where other EU member states will also count for EU support and this in turn may contribute to a reduced fiscal reliability of all the Eurozone, higher inflation pressure and to weakening of the value of money [Tendera-Właszczuk 2011, s 48-49].

Overcoming a crisis depends most of all on the will and discipline of the affected countries, determination and consistency in reform implementation as well as on fiscal consolidation. The changes introduced by governments lead to social discontentment, on the other hand the financial assistance from the other member states of the Eurozone is treated also as an act of solidarity, apart from its strictly supportive meaning. The debt crisis in the European countries disclosed partly the lowered confidence in the authorities of the Eurozone and in the manner of its management, which spurs dilemmas as for the appropriateness of the renewal and further support by the assistance programmes. Support for

the countries at risk affects negatively the entire Eurozone, also the currency. Some of the countries remain still patient and solidary, however the rising social discontentment from co-financing others may lead some countries to question their participation in the next programmes or assistance actions, especially when considering that come countries have the right to refuse to participate in money lending under certain circumstances.

5. Conclusions

The aim of this work was to define crisis in the economy, to identify the instruments of government and central banks and to provide their characteristics. Various anti-crisis instruments applied by states were researched and presented here. The specific case studies used referred to the following EU countries: Hungary, Greece, Ireland, Portugal and Poland. Additionally the EU assistance package and its instruments (EFSM, EFSF and ESM) were described. These instruments were used to protect stability in some of the EU countries. From the conducted comparison a conclusion may be drawn that governments and central banks of individual countries applied a number of anti-crisis actions by means of instruments adequate to the situation of their economies. For instance, in Portugal the instrument used was bank capitalizing and in Poland the guarantee and warranty limits were increased for the economy and the financial market. Moreover, it was noticed that the values of packages as well the financing sources for the preventive anti-crisis actions were very diversified. These actions applied to the banking-financial sector, the real term economy, legal actions, informative actions, transfers of financial means, among others, and were undertaken in different time periods.

The anti-crisis instruments described in this article were used by the EU member states between 2008 and 2011.

The result of the conducted analysis is the identification of the specific policies and their instruments applied in the cases of such EU countries as: Hungary, Greece, Ireland, Portugal and Poland. The evaluation of this applied measures on the EU level, due to the specific nature of this question, should be the subject in a separate discussion as it is difficult to unambiguously state if the anti-crisis actions applied by governments and central banks are effective. Such results may be evaluated only with a long-term period, as according to many economists, fighting for the stability of the financial systems still continues. Additionally, the following questions should be also addressed in future research on the subject of crisis, when state intervention should begin, how long it should continue, what should be its scope and level and in which countries it should be applied.

References

- 1. Badura Madej W., *Wybrane zagadnienia interwencji kryzysowej*, INTERART, Warszawa 1996;
- 2. Balcerowicz L., *Zrozumieć kryzys finansowy*, Polskie Wydawnictwo Naukowe, Warszawa 2011;
- 3. Bednarczyk J., *Współczesny kryzys gospodarczy*, CeDeWu,Warszawa 2009;
- 4. Drozdowicz Z., *Liberalne wyzwania*, Wydawnictwo Fundacji Humaniora, Poznań, 1998
- 5. Famielec J., Kryzys finansowy a rozwój przedsiębiorczości, [w:] Uwarunkowania przedsiębiorczości - różnorodność i jedność, red. K. Jaremczuk, PWSZ Tarnobrzeg, 2010;
- 6. Gilliland B. E. & James R. K., *Crisis intervention strategies*, Brooks/Cole Publishing, California, 1993;
- 7. Grabowski T., *Ekonomia polityczna kapitalizmu*, Państwowe Wydawnictwo Ekonomiczne, Warszawa 1971;
- 8. Huerta de Soto J., *Pieniądz kredytowy i cykle koniunkturalne*, Verbariusz, Warszawa 2009;
- 9. Kawa P., Działania antykryzysowe i ich konsekwencje dla długookresowego wzrostu gospodarczego w krajach na średnim poziomie rozwoju, [w:] Efekty działań antykryzysowych w krajach na średnim poziomie rozwoju, red. A. Wojtyna, Polskie Wydawnictwo Ekonomiczne, Warszawa 2012;
- 10. Lindemann E., *The symptomatology and management of acute grief*, American Journal of Psychiatry, 1944, nr 101;
- 11. Oręziak L., *Strefa euro wobec kryzysu finansowego*, [w:] *Unia Europejska wobec kryzysu ekonomicznego*, red. J. Osiński, SGH Warszawa 2009;
- 12. Piocha S., Radlińska K., *Antykryzysowe programy ratowania polskiej gospodarki przed skutkami globalnego kryzysu*, Zeszyty Naukowe Instytutu Ekonomii i Zarządzania, Koszalin 2011;
- 13. Piocha S., Radlińska K., *Antykryzysowe programy ratowania polskiej gospodarki przed skutkami globalnego kryzysu*, Zeszyty Naukowe Instytutu Ekonomii i Zarządzania, Koszalin, 2011;
- 14. Rutkowski J., *Ekonoma polityczna kapitalizmu*, Państwowe Wydawnictwo Ekonomiczne, Warszawa 1971;
- 15. Rybiński K., *Jak się pozbyć kryzysu w pięciu uderzeniach* "Uważam Rze", 2012, nr 14;
- 16. Szambelańczyk J., Wyzwania regulacyjne wobec doświadczeń globalnego kryzysu finansowego, Szkoła Główna Handlowa, Warszawa 2011;

- 17. Szyszka A., *Behawioralne aspekty kryzysu finansowego*, Bank i Kredyt, 2009, nr 40;
- 18. Tendera-Właszczuk H., *Stabilność finansów publicznych państw Unii Europejskiej* w obliczu kryzysu zadłużeniowego, UEK Kraków 2011;
- 19. Wancio A., Europejskie Mechanizmy stabilności finansowej gwarancja stabilności strefy euro czy gra na zwłokę, Wspólnoty Europejskie, 2011, nr 3;
- 20. Wojtyna A., *Kryzys finansowy i jego skutki dla krajów na średnim po- ziomie rozwoju*, Polskie Wydawnictwo Ekonomiczne, Warszawa 2011;
- 21. Wypłosz C., *Strefa Euro kryzys i strefa euro*, Zeszyty BRE Bank CASE, 2011, nr 115;
- 22. Informacja dotycząca działań antykryzysowych podejmowanych w wybranych krajach świata, Ministerstwo Gospodarki, Warszawa 2009;
- 23. http://stats.oecd.org.

Zbigniew Tokarski*

DETERMINING THE AMOUNT OF FINES FOR CARTEL PARTICIPANTS IN THE EU

Abstract

Price-fixing, quota agreements, division of markets, the general cartel agreements, for years absorbed attention of economists and politicians who have been trying to work out effective policies to deal with this type of behavior. Despite these efforts, limiting the competition in the market through the creation of illegal agreements is still a common phenomenon in today's economy. To make sure that each participant of an illegal agreement will be justly punished multistage EC has developed a mechanism for calculating fines and systematically improves detection and level of penalties imposed to deter companies from violations of competition law.

Key words: illegal agreements, cartel, competition, calculation of fines, leniency procedure.

1. Introduction

Companies from various sectors in the European Union more and more often are coming into conflict with the competition law. Certain agreements are strictly prohibited, including: pricing and other terms of trade, setting the volume of production and the distribution and supply markets. The European Commission is trying to get rid of these agreements and to punish their participants.

After the discovery of a cartel the trial starts and the judgment is delivered and the fines imposed. Taking into account the case law of the European Commission one can conclude that the role of fines imposed on cartel participants is not only a punishment for past offenses, but it also deters companies from engaging in future, in an agreement that violates the law of competition.

The purpose of this article is a theoretical perspective on different types of anti-competitive agreements and to show the mechanism of calculating the fines applied by the European Commission.

^{*} mgr, Wyższa Szkoła Biznesu – National-Louis University in Nowy Sącz, Katedra Zarządzania.

2. Types of anti-competitive agreements

Agreements may be concluded by a company at different levels of turnover. If the contract is concluded by companies operating at the same level for, example: several manufacturers market the same product, then we are talking about a horizontal agreement. The purpose of such an agreement is usually the restriction of competition through joint coordination of marketing activities. Typical horizontal agreements of a price-fixing cartel are quota arrangements and a division of markets or purchase. Horizontal agreements are perceived by antitrust laws as the most harmful to the market and consumers. Therefore, such cases deserve to be prosecuted to the fullest extent of the law in most civilized countries.

Agreements concerning price fixing directly or indirectly, fixing other conditions of business transactions, determining production volumes in relevant markets, technological development, the size and structure of investment participants in agreements or the division of markets or stores are all prohibited. Prohibited also are agreements leading to discrimination against trading partners outside an agreement and imposing additional conditions of trade agreements contrary to law and not connected with the transaction [Fornalczyk 2007, pp. 87-88]

Illegal agreements may take the form of arrangements made in any way by individual entrepreneurs or their compounds. It is not uncommon that such an agreement is formulated like a civil contract or resolution by the Association of Entrepreneurs. However, if companies are aware that such an agreement is illegal, most arrangements are not usually put in written form, but are made orally in order not to leave any traces behind.

Among the most important types of anti-competitive agreements are:

- a) Price-fixing directly and indirectly fixing prices and other conditions of purchase and sale of goods. The direct determination of the price level means for example introducing a minimum price for the product, while the indirect fixing of prices could mean for example setting margins, discounts, payment terms, dates, and the calculation of increases in prices [Connor 2001, s.91].
- b) Quota agreements to reduce the production or development. In this type of agreement often the main idea is to reduce overproduction and to halt the decline in market prices. The mechanism of reaction rates on the volume of production can be traced by analyzing the decisions of any cartel. Participants in such an agreement start limiting their production and try to keep prices stable at a high level. The calculation of production, production limits and reduction capacity jointly by the parties to the agreement is strictly prohibited.

- c) Division of a market or purchase assigning each participant a specific area of an illegal agreement and establishing the market for each participant's percentage share of the market. Market allocation can be done by allocating customers and suppliers and limits on supply and sales in certain markets. Market allocation can be either territorial or subjective assortment. Cartels concluded by firms from different countries typically allow companies to maintain dominance in their home markets. Thus limiting competition, the company stabilize its profits, usually setting a price above the market rate.
- d) Restricting access to the market characterized by unequal treatment by members of the agreement other market participants. In the most extreme form of such discrimination this may result in the elimination of companies which do not take part in a cartel from taking part further in the market. Restricting access to the market and the unequal treatment of partners may also be the objective of agreements and the use of other restrictive practices such as allocation of markets or collusion.
- e) Unrelated binding agreements making the signing of a contract subject to acceptance by the other partner, the additional benefits that are not related to the subject matter of the contract. Such agreements occur frequently in large retail chains, which demand from smaller partners, the adoption of additional conditions in return for the opportunity to sell their goods in the chain.
- f) Bid-rigging involving the joint establishment of companies concerning the detailed terms and conditions of its tender offer, the most common wage and price range. Bid-rigging may also be practiced between the organizer of an auction and one of the companies seeking the contract. In this case, collusion is the common setting of such tender conditions that favored one, the chosen company.

It must be added now that it is very important to remember that according to laws governing the right to fair competition, an operator is a person who conducts business. The method of financing and legal form of a project do not matter. However, according to antitrust laws it concerns business by trade industry organizations such as chambers, associations, corporations or associations governed by a broader context.

3. Calculation of fines

The perpetrators and participants of a detected cartel must be justly punished. Therefore, the Commission has developed a complicated procedure that allows the imposition of penalties on any company that brakes laws of competition. Penalties are monetary, but later in the article will be referred to also as fines.

The method of setting fines for companies participating in a cartel consists of many steps. The Commission takes two basic elements into account when calculating amounts: deterring companies from violating these competition laws and the promoting of cooperation with the European Commission. According to guidelines on the prosecution of companies from 2006 [Reports on Competition Policy 2007, s.21-32] EC is obliged to calculate each fine for each individual participant in a cartel separately.

Initially the base amount is calculated. It consists of two basic elements. First, the level of significance is assessed a cartel and is awarded a value equal to the max. 30% of sales in the relevant year (usually takes into account the latest full year by the end of the cartel). Then this value is multiplied by the number of years of the cartel. The next step in calculating the base amount is the addition of another component called an additional amount, representing 15-25% of annual sales company, in order to further deter companies from entering into illegal horizontal agreements. For the significance level and an additional amount was fixed at an appropriate level, the EC takes into account several factors such as market shares of the companies involved, the geographic scope of the cartel's structure and harm to society. First to be assessed is the level of significance of the cartel and its value is set equal to 30% of the max. sales figures in the relevant year (the last full year before the end of the cartel is usually taken into account). This value is then multiplied by the number of years the cartel exists. The next step in calculating the base amount is by adding in another component called the "additional sum", representing 15-25% of the annual sales of the company, with the aim of further deterring companies from entering into unlawful horizontal agreements. In order that the level of significance and additional amount are set at the right level, the EC takes into account several factors, such as market share of enterprises involved, the geographic scope of the cartel's structure and harm to society.

The base amount can then be increased or decreased depending on several elements. Mitigating circumstances may exist such as: cooperation with the European Commission, limited participation in the cartel, immediately exiting the cartel after its discovery by the EC. On the other hand, aggravating circumstances may also exist such as: the refusal to cooperate with the European Commission, leadership in the cartel, forcing other companies to participate in an illegal agreement, and especially repeat offences. Each previous violation of the laws of competition, for example, through participation in other cartels in the past, may increase the base amount by up to 100%.

Some cartels are very profitable and operate for many years, meaning that it may be more profitable for the company to invest money to participate in such an agreement and then afterwards simply pay the additional fine. Therefore, in the end the EC may decide to increase the fine if high profits of cartel members involved are so large and the penalty so low as to have no detrimental effect on them.

Other rules affecting the amount of the fine are: limiting it up to a max. 10% of the global trade figures of the accused company in the year preceding the termination of the cartel and the possibility of mitigating the punishment that weakens the company and carries with it the only negative economic and social consequences in the region.

The greatest potential for reducing fines is participation in the leniency program. The commission may grant so called immunity from penalties (100% reduction or cancellation of all fines), assessed from participation in an agreement if:

- a) the company is the first to provide the Commission with sufficient evidence to begin proceedings. The immunity referred to in this section may be granted only if at the time the evidence is delivered, the EC did not already have enough evidence to start proceedings.
- b) the company is the first to provide the Commission with sufficient evidence to conclude that the law had been violated under article 81 of the Treaty of the European Communities (TEC). The immunity referred to in this section may be imposed only if at the time the evidence is delivered, the EC did not already have sufficient evidence proving violation of the law according to art. 81 of the Treaty of the European Communities (TEC) in the cartel's case or if so far none of the other companies have received immunity under the conditions previously from the point 1a., in the same case.

In addition to meeting the conditions of 1a or 1b, a company that is trying for immunity must respect the following principles:

- a) co-operation must be complete and continuous throughout the procedure conducted by the EC. The company must provide all the evidence relating to the matter pursued, which are in its possession.
- b) the company must terminate participation in the illegal cartel agreement before presenting evidence relating to the 1a or 1b.
- c) has not forced other companies to participate in the cartel.

A company that wishing to commence efforts to apply for immunity should contact the Directorate General for Competition, European Commission. If the company does not meet the conditions described in points 1. and 2., it will be immediately informed of the fact that immunity cannot be granted. In this case, the company may withdraw from the European Commission previously submitted evidence, or apply for a partial reduction of the penalty [see Hovenkamp, 1994, p.67-69].

Until the process concerning application for immunity has been completed, the EC will not consider any other requests for immunity relating to the matter under consideration.

Companies applying for immunity, but did not meet all the requirements, usually have a second opportunity to reduce the penalty. In order for a reduction to be granted, several important conditions must be met. The company applying for a reduction in EC penalty must provide evidence that it would represent a significant value compared to the material already held by the European Commission. Moreover, such a company must terminate its participation in all agreements before delivery of the previously mentioned evidence.

The level of reduction in penalty is determined in % and amounts to:

- a) 30-50% for the first company that meets the conditions described above
- b) 20-30% for the other company which fulfills the conditions
- c) up to 20% for any other company which fulfills the conditions.

In a) and b) we may observe a large range of interest. The exact level of the reduction is decided by the European Commission taking into account the time taken to provide evidence and its importance to the ongoing investigation. Before considering applications by companies to reduce the penalty, the European Commission is required to deal with applications for granting immunity in the case.

After determining the level of fines, the company can appeal the judgment to the appropriate court and request a reduction in penalty. Referencing is a common and often effective practice among companies fined.

4. The number of detected cartels and fines

Competition policies implemented by various countries are not identical to each other. However, typically legal systems prohibit firms in certain activities and agreements between undertakings that violate the rules of market competition. In the European Union rules concerning agreements are governed by the Treaty of the European Communities.

According to this treaty horizontal agreements are considered to be harmful to both the economy and for individual consumers. All this makes the fight against cartels one of the main elements of competition policy pursued by the European Commission (EC).

As shown in Chart 1, for the period 2003-2010 the European Commission issued 51 decisions on cartels and fined a total of 344 companies.

Table 1. Commission decisions issued in the years 2003-2010

year	No. of Commission Decisions Issued in the years 2003-2010	The number of companies fined by the EC
2003	5	26
2004	6	29
2005	5	41
2006	7	47
2007	8	45
2008	7	37
2009	6	43
2010	7	76
total	51	344

Source: own study based on: http://europa.eu.int (25.04.2012).

Penalties to companies by the EC are a heavy burden for companies. Chart 2 indicates the sum of total fines imposed on cartels in a given year. The data in this table include the level of fines taking into account fine reductions associated with the leniency procedure, but before the appeal court.

Table 2. Fines imposed on cartels by the Commission members for the period 2003-2010

year	The amount of fines imposed on cartels (thousands of Euro)	
2003	400,791	
2004	368,753	
2005	683,029	
2006	1,846,385	
2007	3,334,003	
2008	2,270,310	
2009	1,622,986	
2010	3,101,218	

Source: own study based on: http://europa.eu.int (25.04.2012).

The commission assumes that some of the companies participating in the illegal agreements may be willing to end its participation in the cartel and provide comprehensive information on its operation, but do not opt to do so for fear of high penalties that are likely to be imposed on them. The EC said that in the interest of the Community milder treatment would be shown to companies which, although involved in the cartel, ceased operations and agreed to cooperate with the EC. In other words, the benefits of assisting in detecting cartel are so great that it warrants establishing a law preventing or mitigating penalties for companies involved in the illegal agreement, if they make a significant contribution to inhibiting cartel operations.

In order to encourage companies to cooperate in the described situation in the preceding paragraph, the EC in 1996 introduced a provision on immunity (called leniency), and reduction of fines in cartel cases [Barlingen 2003, p.54-59]. After five years of applying this procedure, the EC decided to modify it. The procedure confirmed its effectiveness, but the Commission concluded that it could be improved by introducing more transparency, so that firms were more confidence of being granted immunity, or even partial reduction of the sentence for cooperation. Thus there was a closer relationship between the degree to which a penalty is reduced and the degree of co-operation with the European Commission [Report on Competition Policy 2007, p.11].

During the first 10 months of the operation of the revised procedures for leniency, there were 10 European cartels detected, which shows clearly the high effectiveness of this type of regulation. The introduction of the leniency procedure complicated the process of calculating the fine, but significantly contributed to destabilization of the cartels, introducing an additional element of uncertainty and fear, due to the fact that each of the participants in an unlawful agreement could choose to cooperate with the Commission.

5. Conclusion

Price-fixing, quota agreements, division of markets and cartel agreements in general have been key issues for many years for economists and politicians, who have been trying to work out effective methods of dealing with this type of phenomena. Despite their efforts, reducing competition in the market through the creation of illegal agreements are still prevalent in today's economy.

The European Commission is trying to keep up with the regulations, making it easier to combat cartels. To ensure that each participant in an illegal agreement is punished justly, the European Commission has developed a mechanism for calculating fines and systematically improving detection rates and the level of penalties imposed to deter companies from breaking competition laws. The introduction of a fine leniency procedure for the reduction of fines in return for cooperation complicated the procedure. However, there has been a significant impact on the destabilization of the cartels, by introducing an additional element of uncertainty and fear, resulting from the fact that any participant in an unlawful agreement now has the option of cooperating with the Commission.

Current legal solutions allow the Commission to impose a penalty equal to 10% of the company's revenue for the year preceding the decision. Statistics show that the Commission increasingly uses the law and imposes the maximum sentence, arguing that the high and the inevitable punishment for participating in a cartel is the only way to discourage companies from entering into unlawful agreements.

References

- 1. Agililaou P., *Keep to Sustain or Keep to Exploit? Why Firms Keep Hard Evidence*, University of East Anglia (UEA) School of Economic and Social Studies 2012
- 2. Barlingen B. van, The European Commission's 2002 Leniency Notice After One Year of Operation, Competition Policy Newsletter, nr 2., 2003
- 3. Heimler A., Mehta K., Violations of Antitrust Provisions: The Optimal Level of Fines for Achieving Deterrence, World Competition: Law and Economics Review, Vol. 35, No. 1, 2012
- 4. Bartes F., Strzednicki A., *Walka konkurencyjna przedsiębiorstw:* opisy metod walki rynkowej z przykładami i definicjami, C.H. Beck, Warszawa, 2003.
- 5. Bishop S., Walter J.M., *The Economics of EC Competition Law: Concepts*, Application and Measurement, Sweet & Maxwell, London 2002.
- 6. Cabral L.M., *Introduction to Industrial Organisation*, MIT Press, Cambridge, 2001
- 7. Connor J.M., *Price-Fixing Overcharges: Legal and Economic Evidence, Department of Agricultural Economics*, Purdue University, Review of Industrial Organization, nr 18, 2001.
- 8. Fornalczyk A., *Biznes a ochrona konkurencji*, Wolters Kluwer Polska, 2007.
- 9. Gronowski S., *Ustawa antymonopolowa: komentarz*, Wydawnictwo C.H. Beck, Warszawa, 1999.
- 10. Hovenkamp H., Federal Antitrust Policy: The Law of Competition and its Practice, West Publishing, St. Paul, 1994.
- 11. Levenstein M., Suslow V., *What Determines Cartel Success?*, Journal of Economic Literature. tom 44 s.1-55, Nashville, 2006.
- 12. OECD report., *Fighting Hard-Core Cartels: Harm*, Effective Sanctions and Leniency Programmes, OECD, 2002.
- 13. Pietrzyk I., Polityka regionalna Unii Europejskiej i regiony w państwach członkowskich, PWN, 2007.

- 14. Porter M.E., *Strategia konkurencji: metody analizy sektorów i konkurentów*, PWE, Warszawa, 2000.
- 15. Rhemani R.S., Shapiro D., *Słownik terminów ekonomii struktur przemysłowych, prawa antymonopolowego i polityki antymonopolowej*, Urząd Antymonopolowy, Warszawa, 2002.

Community regulation:

- Rozporządzenie Komisji (WE) nr 2790/1999 z dnia 22 grudnia 1999r. w sprawie stosowania artykułu 81 ust. 3 Traktatu do kategorii porozumień pionowych i praktyk uzgodnionych, Dz. Urz. UE L 336 z 29.12.1999.
- 2. Obwieszczenie Komisji Europejskiej z dnia 18 lipca 1996r. w sprawie zwolnienia z grzywien oraz zmniejszania grzywien w przypadkach karteli, Dz. Urz. UE C 207 z 18.07.1996
- 3. Obwieszczenie Komisji Europejskiej z dnia 19 lutego 2002r. w sprawie darowania i obniżania kar pieniężnych w sprawach kartelowych, Dz. Urz. UE C 45 z 19.02.2002

UE Reports on competition policy:

- 1. Reports on competition policy 2011, Official Publications of the European Communities, 2012
- 2. Reports on competition policy 2010, Official Publications of the European Communities, 2011
- 3. Reports on competition policy 2009, Official Publications of the European Communities, 2010